



NORTHERN REGIONAL LEGISLATURE

ADDRESS

by

His Honour

B. E. Sharwood Smith, Esq., C.M.G., E.D.,

Lieutenant-Governor, Northern Region

to the Budget Session of the

Northern Legislature

February 1952

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When this Address was being prepared, there was little thought in the minds of any of us, so soon after all peoples of the Commonwealth had joined in public thanksgiving for the recovery from his long illness, of our late beloved Sovereign, that we were to sustain the grievous shock that befell us on the morning of 6th February.

King George devoted his entire life to the service of his many peoples, unremittingly and ungrudgingly, and he will always stand to all as a shining example of outstanding devotion both as a Sovereign and as a father, in his public duties and in his home life.

Later in this Address there will be found reference to the development of local administration and to the work of the Joint Select Committee of the Northern Regional Council which was appointed to consider and make recommendations on this subject. The importance of this is such that I wish, at this stage in the Address, to emphasise the fact that both I and my Executive Council are fully conscious of the need to go ahead without delay along the broad lines of those recommendations. We feel, as a Council, that we have a joint responsibility to that end and it is our intention to fulfil that responsibility with a minimum of delay. I know that this question of the development of local administration, by means principally of increased delegation of responsibility, both executive and financial, is one which lies uppermost in the minds of all thinking people in this Region. It is one too to which His Excellency the Governor himself attaches the greatest importance. This House, therefore, may rest assured that we propose going ahead, the only limiting factor being the shortage of educated and experienced personnel which is required to man the machinery which we are in the process of evolving. Members, I am sure, will agree with me that what we want is a living thing and not a blueprint. It is easy enough to produce a "pattern" but unless the complementary problem of personnel is faced and overcome, no real progress can be made.

Questions of administration apart, to my own mind the two outstanding needs of this Region are firstly, a more effective use of the land in order that the ever-present shadow of a threatened shortage of food may recede far beyond the horizon, and secondly, a far greater measure of public enlightenment with regard to the needs and circumstances of the day. I conceive it to be the duty, not only of Government but also of every member of the two Houses which together form the Regional Council, to see to it that as many of the ordinary

people of the country as is immediately practicable, are educated to a sense of their responsibilities as citizens both to the communities in which they live and to the country at large. They should learn and learn early the basic facts that condition the world in which they live today. They should learn to overcome the obstacles which lie between them and a better and fuller way of life, and at the same time not to discount their blessings which, in relation to many parts of the globe, are not inconsiderable. They must learn how to protect themselves against exploitation, both by petty officialdom and by the political charlatan. These lessons can best be learnt from persons of proved integrity and practical experience.

It has been said that the membership of the Northern House of Assembly is confined almost entirely to Native Authority officialdom. This is perfectly true, but what is not realised, sufficiently widely, and what I now wish to emphasise, is that at least 90 per cent of the personnel equipped with the experience and education required to qualify them for election to a legislature are to be found in the ranks of the Native Administration services, because the rate of expansion has been so great in recent years that there has always been room for any educated youth of adequate calibre in the Civil Service of the local administration.

Finally, a word on the subject of stability. None of these things which we all want can possibly come to pass unless we can be assured of political stability. There must be public confidence and this can only be ensured and maintained by the "determined gathering together of all persons of goodwill and understanding, whatever their pursuits, origins or beliefs". I am here quoting from my Address on the occasion of the Budget Session of 1950. What I said then is more than ever true today. Given goodwill, it will be possible to overcome most of the major disabilities from which this country as a whole suffers—bribery and corruption in almost every walk of life, ignorance of the true needs of the mass of the people and influences, as yet unimportant, which aim to disrupt whilst professing to reform.

I cannot close this portion of my Address without referring to our sense of loss consequent on the recent retirement of Sir Eric Thompstone. Sir Eric, who loved this country so well, had served here for thirty-two years and had an unparalleled knowledge of Northern Nigeria and of the needs of its people. With his wisdom and staunch devotion to Nigeria, Sir Eric was a leader in whom we all had implicit confidence. He guided our footsteps firmly for more than four eventful years, and it is with a full consciousness of the standard set that I now take up the task where he left off.

I will now proceed to a more detailed summary of the events and activities of the year.

Accountant-General (Treasury)

The expansion in the volume and complexity of Government activity has resulted during recent years in an enormous increase in the work of the Treasury, and the past year has seen the continuation of this increase.

The receipts and payments of the Sub and Local Treasuries of the Region, during the financial year 1950-51 amounted to a total of £12,796,000, as compared with the total of £11,286,000 in 1949-50—an increase of 13 per cent, while the number of receipt and payment vouchers increased by 15 per cent to 219,000. There is every indication that the current year will show no less substantial increases over the 1950-51 figures.

It has not been possible to obtain the full establishment of Senior Service and higher grade Junior Service Officers to fill duty posts and recruitment of new entrants to the Junior Service has been far below expectations and gives rise to grave apprehension regarding future progress. Office accommodation, especially in Regional Headquarters, is entirely inadequate for efficient working. The projected new offices will go far towards remedying this position although allowing very little space for future expansion.

In spite of the increased volume of work and the severe shortage of staff and accommodation, the Regional accounts have been brought as nearly up to date as is possible having regard to the inevitable delays consequent upon distance and available communications. This considerable achievement was made possible only by many hours of overtime and the use of accounting machines.

On the 1st April the Local Treasuries at Bauchi, Katsina and Lokoja were taken over by the Department in pursuance of the policy of manning with Treasury personnel all Local Treasuries that reach a size sufficient to necessitate the service of a full-time Local Treasurer.

It is regrettable to report that the number of cases of losses of Government Funds continues to be high. During the year twenty-eight cases involving approximately £8,500 were reported. The investigations into these losses reveal, in many cases, greatly increased cunning in the perpetration of the frauds. Constant efforts have been made to ensure strict control and it is undoubtedly a fact that these safeguards have proved a deterrent and in certain specific cases have brought frauds to light much earlier than formerly could have been the case.

In May Mr J. M. Pryde retired; he had successfully filled the post of Regional Treasurer since 1948 and had been for many years a well known and popular figure throughout the Region.

Administration

As Members are aware, the Provincial and Native Administrations were heavily engaged during the latter half of the year in the conduct of the elections to the Northern House of Assembly. This immense task was carried out very largely by the Native Administration machinery, and it is a matter of sincere congratulation that the arrangements proceeded so smoothly. Complaints were few and it was apparent that the people had been informed of the procedure for election and appreciated the importance of selecting only those best fitted by character and ability to represent them.

Despite the preoccupation with elections the improvement of the local administration machinery, which has engaged so much attention in recent years, was carried forward unostentatiously. In particular I might instance the increased financial responsibility which has been accorded to those Native Treasuries which are in a sound financial position; this is in accordance with the present policy of delegating responsibility to the local administrations wherever they are in a position to profit by it. Advance has also been made in the improvement of District Councils in many places; in particular the new Council for the Waje area of Kano has been given executive and financial authority and in future will prepare its own budget. During the year a Joint Select Committee composed of Members of the two Regional Houses sat to consider ways and means by which progress in local administration could be hastened and the recommendations of this Committee have been published. It is hoped that 1952 will see a marked acceleration in the progress and development of local government in the Region.

In two provinces welcome changes in the composition of Native Authorities have taken place. The formerly fragmented Native Authorities of the Bassa Komo area of Kabba Province, after nearly a year of careful deliberation, expressed a unanimous wish early in the year to combine into a single Native Authority consisting of a Chief and Council, and His Excellency's approval of this development was received in July. In Adamawa Province a reorganisation which holds out good promise of successful development has been achieved by the incorporation into the Numan Federation of the former Shellen District now reorganised into the Shellen and Longuda Districts.

In view of the very mediocre harvest in 1950 and of the rise in food prices which was to be expected, particular attention has been paid by the Administration during the year to every type of agricultural development designed to increase the production of staple foodstuffs. Mention is made elsewhere in this Report of the progress of the well established resettlement schemes at Kontagora and Shendam and of the Niger Agricultural Project managed by the Colonial Development Corporation at Mokwa. The use of superphosphate fertilisers is

spreading rapidly, particularly in the more northern Provinces. The considerable increase in the number of mixed farmers, particularly in Bauchi Province, is most encouraging, and a host of minor schemes of agricultural improvement are being pursued by the Native Administrations throughout the Region with the assistance and advice of the Agricultural Department.

I regret to report the death which occurred on 30th July of Mai Ari II, Emir of Bin, after sixteen years in office. Members will wish to welcome his successor, Maidalla Madu, to our councils. Bakar, Emir of Dikwa, was formally installed in office by His Excellency the Governor at a ceremony held in Bama on 18th April.

Agriculture

Recruitment to the Senior Service in the Agricultural Department is still far from satisfactory. Against the loss of Mr J. W. D. Goodban (transferred as Director of Agriculture, British Honduras), must be put the re-engagement of one retired officer and the promotion of two Agricultural Superintendents. There are thus fifteen Agricultural Officers and twelve vacancies. This has been offset to some extent by an excess of seven Agricultural Superintendents making a total of thirteen in that grade, to which one expatriate officer was recruited, and there were two promotions from the Junior Service. Two more Development Officers have been posted to the Region recently.

Mr J. Wallace, Deputy Director of Agriculture, retired in January, and his post taken over by Mr J. D. Brown in October. Mr J. Kitching was promoted to the post of Principal Irrigation Engineer.

It is fortunate that an Agricultural Chemist has been appointed in time to take over from Mr Greenwood, O.B.E., who retires in 1952.

A number of posts remain vacant in the Engineering and Irrigation branches, both of which are greatly hampered by lack of staff. It has not been possible to recruit a Soil Conservation Specialist.

The Empire Cotton Growing Corporation have attached another Plant Breeder to the Department, bringing their establishment to two Cotton breeders, and the entomologist staff recruited by the Cotton Marketing Board and attached to the Department now amounts to fourteen, whilst another officer has been taken on by the Empire Cotton Growing Corporation on reimbursement by the Board for work on Cotton Multiplication in Gombe Emirate.

Six Specialist posts remain unfilled, and also a post for an accountant.

The Junior Service position is improving. There has been an increased intake to the School of Agriculture which should make an important difference in 1953.

The rains in 1951 were exceptionally well distributed and continued later than usual. There were no serious periods of drought, planting went forward without delays and growth was even. Fears were entertained at one time of damage from waterlogging and moist conditions at harvest, but proved unfounded.

The corn crops were good everywhere and it was remarkable how market prices eased as soon as sowings were well established, nor have they tended to rise much in sympathy with the big increase in prices for export crops. The shortages caused by the previous year's drought have been overcome.

The groundnut crop for 1950-51 was the lowest since 1942 at 142,526 tons, with some 6,000 tons bought during the following season. Not all this decrease can be attributed to low yields. There was increased local consumption due to shortage of food, some holding for higher prices and a movement into French Territory to obtain the better price prevailing there. The 1951 season should produce at least twice this amount for export. Growing conditions in the country north of Kano were almost ideal and it is there that the widest variations in the crop occur and the major part of the increase in a good year arises.

Cotton has now recovered its position as a major export crop, second only to groundnuts in importance. In spite of the irregular rains the 1950-51 crop amounted to over 75,000 bales, the largest ever produced. Much of this increase can be attributed to greater efficiency of seed distribution and marketing brought about by the use of Cotton Marketing Board funds and the opening up of new areas such as Gombe, where crop yields are better than in most of the cotton belt.

A further large increase in the number of bales for export is expected this year. 11,087½ tons of cotton seed were distributed compared with 9,475 the previous year. Growth was better on the whole though it is unfortunate that higher rainfall has also tended to increase the severity of the pests which infest cotton. A team of six Cotton Cultivation Officers was available for the first time to assist in organising seed distribution, giving instruction in methods of cultivation and stressing the importance of cleaning up the residues of the crop in order to control disease.

The scheme for distributing '26C' seed, the improved selection from Allen, has been accelerated by the opening up of 200 acres of land near Daudawa in Katsina Province for multiplication and by the use of fertilisers in the surrounding areas. Some 7,000 tons of improved seed is expected to be available for distribution from Funtua ginnery this year to that area, and those normally supplied by Mallumfashi, Gusan and Mai-fuchi ginneries. 150 tons will also be sent to Gombe for further multiplication and distribution. The transport of this bulk

of seed is something of a problem and special staff has been allocated. About a quarter of the 1951 crop will be '26C' this year and this proportion should rise to three-quarters in 1952.

Experimental work on cotton pests at Samaru has confirmed that the strict enforcement of a close season for cotton would be effective in greatly reducing the incidence of boll worms, particularly the Sudan Red Boll Worm which is the most prevalent and most damaging in the North as a whole. Results also emphasise the paramount necessity of uprooting and burning all cotton residues after harvest.

In spite of the fact that the great increase in the acreage of Soya beans in the Benue area caused some reduction in the area sown to Bennisced the well distributed rains of May-July was ideal for this crop and the export tonnage is expected to reach nearly 10,000 tons compared with 8,699 in 1950. This is still substantially below the previous average but it is expected that the 60 per cent increase in price, announced too late to affect the 1951 crop, will have a marked effect in 1952.

Soya beans have gained popularity in Tiv Division. Increased acreage combined with the abundant late rains to give an estimated export tonnage double that of last year. The rapid expansion of this crop is shown by the following figures of export tonnages purchased:—

1947	...	...	10
1948	...	...	738
1949	...	...	957
1950	...	...	3,506
1951	...	...	8,000 (estimate)

There is likely to be a distinct check henceforward as the export price has not risen this year.

In Southern Zaria traders are buying split dried ginger at 1s 3d to 1s 9d per lb and railing it to Lagos for export. It is expected, therefore, that, in spite of the increased acreage grown this year, the export tonnage of cured ginger bought in Kaeia Ginger Market will not greatly exceed the sixty-seven tons bought there in 1950.

The Nigerian Tobacco Company are extending their activities to a number of Provinces besides Zaria, where Virginia leaf has been grown and cured since before the war. Sokoto and Kano are progressing well. A very large overall growth in the crop was obtained in 1950-51 when 735,865 lbs of cured leaf were bought by the Company compared with 300,715 lbs in 1949-50. Assistance has been given by the Agricultural Department in seed selection, fertiliser experiments, and trials in the use of mechanical cultivation in expanding production.

Interest in the cultivation of rice is being stimulated wherever possible. It has many advantages as a food crop, such as potential high yield and the utilisation of the natural fertility of river valleys. Schemes for the controlled irrigation of rice to the extent of some 7,000 acres are in hand near Bida. The Sokoto Rice Mechanical Cultivation scheme ploughed 13,500 acres and a successful crop was harvested. The target for this year is to exceed 20,000 acres. A minor scheme on the Shemankar river in Plateau Province ploughed 500 acres and aims to complete 2,000 this year. Yields here were particularly satisfactory at 2,000 lbs paddy per acre. Multiplication of improved varieties of medium-water rice continues.

An increased research programme was carried out at Samaru during the year, and two new officers (a Chemist and a second Cotton Breeder) were added to the permanent staff.

As in the past three years, the Chemistry section has been mainly engaged with trials designed to determine the most effective and economic method of introducing the use of fertilisers into peasant agriculture.

In 1950 experiments had shown that the large sized granules of superphosphate previously issued under the Fertiliser Distribution Scheme could with advantage be replaced by granules of ordinary commercial size. The method of application of this new type of granule by means of separate scoops delivering the correct dosages for groundnuts and guinea corn was demonstrated to members of the Fertiliser Teams at Samaru in January, 1951.

During the year experiments have been made with guinea corn at all major stations to find the economic return to be expected from the addition of small amounts of nitrogen to superphosphate and to phosphatic manures lacking the sulphur contained in superphosphate. An important part of these experiments will be the assessment of the residual effect of these fertilisers passed on to the groundnut crop in 1952, for during 1951 it has been shown that the addition of sulphur—a commodity at present in short supply—greatly increases the growth of groundnuts both at Samaru and at Kontagora.

The arrival of new staff has enabled the Chemistry section to resume the analyses of soils and plants, which for some time past have had to be referred to Ibadan.

The laboratory once more carried out the analysis of the samples of the year's ginger crop sold in the Kacia area. The samples were all of high standard, and certificates of analysis were issued.

The most important new work undertaken by the Botany Section was the initiation of a programme of guinea corn breeding. Under the auspices of the E.C.A., Professor O. J. Webster of the United States Department of Agriculture and Nebraska University was posted to Samaru for eight months, and he has examined the performance in various Northern stations of sorghums from the U.S.A. and compared

their characteristics with those of local varieties. As a result of his preliminary findings, breeding programmes have been started with the objects of producing—

- (1) varieties particularly suited to settlement schemes such as Mokwa and Shendam,
- (2) varieties containing a sweet juicy stalk, which will be palatable to cattle after the grain has been harvested,
- (3) varieties suited to the peculiar conditions of the extreme northern area and the Plateau, where there are at present no reliable high yielding guinea corns.

The first year's work has made it clear that none of the existing American varieties is likely, without further breeding, to suit Nigerian conditions in the main guinea-corn areas, though some of them showed promise on the Plateau and in the extreme north at Daura.

The research work on cotton continued to be carried out by staff provided by the Empire Cotton Growing Corporation. Their team now consists of two Plant Breeders, one entomologist and one field officer newly arrived.

Cotton breeding work has continued on the two main lines previously followed—

- (1) the establishment and accelerated spread of the "Samaru 26C" strain to the whole of the cotton area as an improved strain, and
- (2) the breeding and testing of further improved substrains one of which may eventually supersede 26C.

Further confirmation of the superiority of this strain was obtained in the 1951 trials when 26C gave a lint yield 16 per cent higher than the mean of three stocks of ordinary commercial seed.

Under the second head some very promising substrains are already under trial, but tests for yield and lint quality will have to continue for several more seasons before any of these can reach the stage where they might supersede 26C.

On the entomological side, the survey of the incidence and bionomics of cotton pests has continued, and insecticide trials have again been carried out at Samaru and Daudawa. The work has confirmed that the strict enforcement of a close season for cotton would be effective in greatly reducing the incidence of boll worms. This result emphasises the paramount necessity of uprooting and burning all cotton residues after harvest, and of not planting the new crop earlier than the beginning of July.

Groundnut selection and breeding work has been continued both at Samaru and at Kano. Cassava clones have been further tested, and benniseed breeding and selection has continued. New introductions under observation include twenty five rice varieties and ten tobaccos.

A full programme of field trials investigating agronomic and varietal problems of all the more important crops has been carried out at Samaru, and at other stations throughout the Region under the general control of the Specialist staff at Samaru.

The centralised Entomology section of the Department has started a survey of the stem-borers of Northern cereal crops, with a view to assessing the economic importance of these pests and the possible development of simple control methods which could be applied by peasant farmers.

In Sokoto a number of local grasses are under trial both as straight leys and as mixtures; and silage has been made from various fadama grasses principally "Lalake" and "Burugu". In Bornu it was found that two bullocks confined to ten acres natural grazing did well but that the grazing on five acres was insufficient.

The scheme for groundnut multiplication financed by the Northern Regional Production Development Board at Dambarta for the multiplication and distribution of improved groundnut seed (Kano 50, a selection from M.D.351) was carried a stage further by the issue of improved seed to 650 farmers in the vicinity of the multiplication farm. The whole resultant crop is now being purchased by the department for re-issue to an increased number of farmers next year. A premium is paid for these nuts grown for seed.

Expansion of mixed farming, already steady and substantial, would be even greater if it were not retarded by difficulty in obtaining cattle and the shortage of trained Native Authority staff to supervise the work. The largest net increase (762) occurred in Bauchi which now has a total of 1,983 farmers and is only slightly behind Kano with 1,994. Katsina has easily the largest number with 3,237.

The important work of cattle breeding and selection has been continued at several stations. At Shika the herd average is now over 300 gallons of milk per lactation, while several lactations have exceeded 4,000 lbs. At Maiduguri the Shuwa herd is being gradually improved by selection and culling of low yielding cows. At Yola a herd of Adamawa Gudali cattle is being built up.

The policy of grading up middle belt Muturus with Ndama bulls will be taken forward a long stride when the new herd of some sixty Ndama cattle arrives from French Guinea. A number of middle belt cattle surveys disclosed the fact that Benue Province, with some 20,000, had easily the largest population of these cattle.

Anti-erosion measures continued to be strongly emphasised on all Government stations and farms and in all extension work. Contoured ploughing separated by grass strips is the form practised on most of the tractor farms. Some terracing has also been done—it is expensive but more permanent than the grass strips which too easily come to be regarded as good fallow and dug up.

The demonstration schemes at Gyel and Vom Turu on the Plateau are still hampered by the non-co-operative attitude of the local farmers. Soil Conservation Pilot Schemes are in hand at Eggon (125 acres) and Lang Tang (80 acres) in the lowland areas of Plateau Province. In Kano the first part of the anti-erosion programme at Jogana has been completed and some five square miles of land have been terraced. Surveying in connection with a new programme of work at Baduma—twenty-one miles along the Katsina road—is now in hand. At Gusau the problem was tackled by the planting of trees and grasses and in western Sokoto, where wind erosion is bad, concerted propaganda by all Departmental and Administrative Officers has induced many farmers to plant Gamba grass round their farm boundaries as a wind (and water) break. A conservation and drainage scheme has been constructed near Yola on waterlogged land and is working successfully.

Although the Department has established several Tractor Unit Farms in various Provinces it is still not possible to record any solid success with upland tractor farming. The crops, soils and rainfall in this region do not lend themselves to complete mechanisation, with the result that the saving of hand-labour is not sufficient to compensate for the cost of maintaining tractors for upland work. On the lowlying fadamas, however, where the cultivations necessary for rice growing are confined to ploughing and disc harrowing, the tractors are remunerative. Apart from the Sokoto Rice Scheme already discussed, fadama ploughing has been done at Kano, Shemankar, Bida and Yola.

At Maiduguri an interesting trial was carried out on the relative profitability of Hand, Mixed and Mechanised Farming. In this trial Mixed-Farming gave the best result. Tiv Native Administration have set up a 840 acre upland tractor farm. This farm is under the direct supervision of the Agricultural Department. Preliminary clearing and planting has been done by hand and carefully worked, and tractors will only be introduced to do subsequent cultivations where it is proved that they can do the work cheaper or better.

Under the Mines Land Reclamation scheme in Plateau Province 266 acres have been levelled and treated with compost to date. The grass cover produced by the compost has been good to begin with but tends to thin out after a year or two.

Two Irrigation schemes of about 3,000 acres each are in hand in the Bida area of Niger Province. The primary purpose of the schemes is the development of rice land. Expenditure is being met from Colonial Development and Welfare Funds.

A Senior Service Officer was posted to Sokoto early in 1951 for irrigation work. An irrigation team was formed and based on Birnin Kebbi. Several schemes varying in size from 50 to 700 acres have been surveyed and construction has been begun. Shortage of Senior Service Staff is still hampering development in this line.

The Irrigation Training School at Sokoto passed out four trainees and enrolled a further eleven. Unless young qualified engineers can be recruited however to take charge of these trainees as they pass out and form irrigation teams, it may be necessary to close the school.

In the more northerly provinces superphosphate fertilisers have proved reasonably popular. The use of fertiliser is gaining ground in these areas gradually and on poorer soils results have been obvious to the farmer. Results were much better owing to the steady rainfall than in 1950 with its drought conditions.

Further south and in the Middle Belt superphosphate does not give the same pronounced results as in the north and experiments are being continued to determine whether the use of fertilisers is economically justifiable.

Training of staff for the Agricultural Department and Native Administrations has continued as usual. Of the 131 students in the Agricultural School at the moment ninety-two are training to be Government Agricultural Assistants, twenty-three are in the Junior Native Administration Class and sixteen on the Field Overseer Refresher Course.

The weed *Kashin Yaro* is still spreading and attempts to check it by communal eradication have had but limited success. In Kano 2,500 acres were sprayed with the Sodium Salt of 2,4-D. Work was concentrated on cattle tracks and areas adjacent to farms and three types of sprayer were used. As a measure of control on particular areas this treatment can be carried out at a cost of 10s to 15s per acre (excluding supervision). It can never bring about complete eradication, however, because the seeds are not killed and can lie dormant for years. The weed-killer is also lethal to trees and broad-leaved crops, and therefore can only be used on open unfarmed land.

Some of the dairy farmers in the Kano scheme had to be closed down during the year because of mismanagement of the milking stock issued to them, but there are still fifty farmers remaining. In Kabba Province the dairies at Kabba and Okene are continuing to produce a substantial amount of milk and butter for sale.

At Shika stock farm an 8-point Auto-Recording Milking Plant has been installed and has been working since September. No major difficulties were encountered and both the cows and staff took to the change over smoothly.

The production of vegetables and fruit for sale continues to be increased on Agricultural Stations and in Native Administration Gardens and Orchards. At Kwarre in Sokoto an orchard of 1,204 trees of various types was established. From Yandev in Benue more than 5,000 fruit trees were sold or distributed. Kano Native Administration sold £500 worth of vegetable seeds to growers.

Commercial pig rearing was handed over to the Department of Commerce and Industries, but a breeding herd for the maintenance of improved breeding stock is being kept on at Shika. From this, eighty boars and breeding sows were distributed this year as well as maintaining supplies of bacon pigs to Cold Store.

The Kano cattle auction continued and was run this year on a strictly cash basis. A Market for cattle was opened at Funtua in March and has operated fortnightly for railing cattle.

Agricultural shows were held during the year in Katsina, Zaria, Bauchi and Maiduguri.

The Sugar crushing machinery in the Region is now adequate for the amount of cane produced surplus to the requirements of the raw cane trade. Further expansion will be limited by the amount of cane grown.

The number of small house mills operating in the 1950-51 season was 656. This was a poor year for production on account of low rainfall in 1950.

Work is in progress in Zaria Province on improving the design of furnaces and evaporating pans in order to reduce the amount of fuel used. It has been shown that the quantities can be halved by controlling draught and increasing the surface area of the liquid.

Audit

The volume of work dealt with by the Audit Department in the Northern Provinces continues to increase. There has unfortunately been no corresponding increase in staff and during most of the past year it has therefore been necessary to concentrate on the audit of Government Accounts at Regional Headquarters to the detriment of the touring programme, which has had to be curtailed severely. However, although the position is not yet satisfactory, there has been some improvement in later months, and for the first time for many years it is possible to report that there are, at the present time, five Audit officers on tour throughout the Region.

It will be appreciated that this improvement should benefit most of all the Native Authorities, the audit of whose accounts forms such an important part of the work of this Department. The volume and complexity of Native Treasury accounts continues to grow with their added responsibilities in connection with their own and with Government works, and the desirability of more frequent audit inspections becomes increasingly obvious.

Aviation

The year under review has seen considerable development of the civil aviation facilities in the Region, where both international and internal air traffic has continued to show a marked increase.

The most important developments have been at Kano, which of course is an important international airport and an essential stopping place on the major trunk routes from Europe to South and West Africa. Work has started on the construction of a new instrument runway, which, when completed, will be over a mile and a half long and equipped with the most modern lighting systems. During the past year it was necessary to improve the facilities of the terminal building to enable the ever-increasing traffic to be dealt with, and at the same time comprehensive plans were made for the erection of an up-to-date terminal building which will be provided with the modern equipment necessary for the handling of a large volume of air traffic. When the new runway and terminal building are completed Kano Airport will be able to cater for the needs not only of British but of foreign jet airliners for very many years to come. Aircraft movements at Kano showed an increase of some 30 per cent as compared with 1950, whilst the number of passengers using the aerodrome increased to over 50,000.

Maiduguri has been nominated as a bad-weather alternative aerodrome for the British Overseas Airways Corporation services to West and South Africa, and an air traffic controller, trained in the department, has been posted there. The importance of Maiduguri was clearly seen during the latter part of last year when Fort Lamy was isolated by flooded roads and the only communication was by air. For about ten weeks during this period several hundred aircraft operated into and from Maiduguri, carrying essential stores to Fort Lamy.

Kaduna is becoming an increasingly important aerodrome. Apart from the regular West African Airways Corporation services, international aircraft use the aerodrome regularly in connection with the War Office troopng programme of army personnel and their families for West Africa, which is now carried out entirely by air.

The importance of Jos as a business and recreative centre is reflected in the increased amount of air traffic handled during the year, whilst other aerodromes within the Northern Region have also dealt with increased traffic.

Clerical Training College

Sixty-seven students passed out from the Clerical Training College at the end of the 1950-51 Course, of whom forty-five obtained the College Leaving Certificate. Ten students in the Shorthand Class passed the Pitman's Theory Stage II Examination, and in the Stenotyping Class two students obtained the London School of Stenotyping Certificate for a speed of 100 words per minute in Palantype; two others obtained Certificates for a speed of 80 words per minute.

106 students were admitted to the 1951-52 Course, a considerable increase on the intake of the previous year. The College continues to endeavour to meet the demand for trained personnel in the Native Administrations, and also the increasing demand for clerks of Northern Provinces origin for posts under Government.

Commerce and Industries

Over 700 tons of superphosphate fertiliser were sold to farmers at the end of 1950 and the beginning of 1951, 300 tons were obtained for the cotton multiplication work based on Daudawa, and some 1,800 tons issued for free distribution in the Provinces of Sokoto, Katsina, Kano, Niger, Zaria, Bauchi, Bornu and Adamawa.

Results were variable, due in large part to the nature of the sowing rains, but a most encouraging feature was the way that farmers who had been disappointed by the results of the 1950 sowings—due to the bad rains—were surprised at the effects visible in 1951 on crops grown in the areas fertilised in 1950. It can however be said with confidence that from Argungu and Gwandu Emirates in the west to the hills of Gwoza in the east, all Provinces have a large number of farmers who have both seen and been impressed by the results of using superphosphate.

Owing to the uncertainties which surround sowing—in Sokoto Province for instance, five to seven sowings were general in 1951—it has been decided to teach the peasantry application of the fertiliser after germination. This appears to give the greatest insurance against all combinations of the vagaries of the weather, and being much simpler, is more popular with the farmer.

Sales at the end of the year had started in Kano and Bornu Provinces, but it is unlikely that the high figure for sales in 1950 will be repeated, chiefly because the main buyers—the 17,000 farmers in Sokoto—did not see much for their investment owing to the uncertain start of the rainy season.

A pilot fish pond was built and stocked at Panyam during the year and the results are such that it is proposed to push forward with the first major construction work during 1952.

For the first time a reasonable profit was made by the Vom dairy during the six months ending the 30th September; construction of the new modern dairy started during December.

The Minna piggery, which will comprise in one area a piggery as big as and replacing those formerly run by the Veterinary and Agricultural Departments, was greatly expanded during the year and was supplying 150 pigs per month to the internal market by the end of the year. Further expansion is now being considered.

Groundnut Oil Mills were built at Funtua and Kaura Namoda. Unforeseen difficulties in disposing of the oil in the local market has led to the proposal that these mills should be used for the expression of shea butter and cotton-seed oil. The matter is being further pursued.

The first £1,000 worth of batts of the Kano Citizens Trading Company were sold during December and thirty looms are now working.

Training of the operatives proceeds and it is hoped that during 1952 all fifty looms will be in operation for two shifts per day.

The Makurdi Boat Yard was closed during the latter part of the year while the Wood Working Officer was on leave. It had in June produced its first commercial craft—a 25 foot cutter rigged boat with leeboards—which was sold at public auction to an Ibo trader for £155. The yard is to reopen early in 1952 with a larger staff and more apparatus.

Some success in setting up weavers from the Sokoto and Minjibir centres has resulted during the year, but textile work at Horin is still disappointing. The large amount of money in circulation at the end of the year has shown itself in the reluctance of the weavers to work; it is probable that this phase will pass as the groundnut money goes out of circulation.

Co-operative

During the year under review, the consolidation of societies has continued, and of the most numerous class (the salary-earners' Thrift and Loan Societies) less than ten remained unregistered at the end of the year.

Both members of the Senior Service staff were on duty from the end of March onwards, and it was possible to post one officer for duty in the southern half of Katsina Province; the result has been that there are now sixteen village credit societies and a few village shops in that area, and the question of forming marketing societies for cotton and groundnuts is being investigated. The credit society at Musawa is worthy of note, because it was started by the District Head without any assistance from the Department. The village credit societies in the Horin Province have had to be dissolved, as after five years they are still unable to do anything towards the keeping of their accounts.

Consumers' societies are steadily increasing in number; at the end of the year there were eighteen of these, with four in process of formation. Four of these societies are in secondary schools and elementary training centres, and it is hoped that the pupils going out from them will prove useful propagandists for the spread of co-operation.

The Kano Blood and Bone Meal suffered severe losses during the last financial year and is now in liquidation. The Vom Community School now receives a Grant-in-Aid from Government and should be able to balance its budget this year. In the Igbomina area of Horin Province two group farming societies have been started during the year.

There are as yet no secondary societies in the Region, but it is expected that the Thrift societies in the larger centres will combine to form local unions for purposes of investment.

Development

The Revised Ten Year Development Plan, which was being drawn up when I spoke to you on this occasion last year, came into effect on the 1st of April. I am pleased to be able to report that since then progress in all fields of development has been noticeable. There is still a shortage of staff, particularly in the Public Works Department, which has to a certain extent hampered progress. This same shortage of staff has also led to a deterioration in some of our existing assets, notably the great Trunk Roads on which the economic soundness of the Region will largely depend. However, it does at last seem probable that reputable contractors are prepared to undertake road construction and tarring in the Region; with their assistance I hope we shall solve a problem which, I confess, has given me some anxiety in recent years.

Much is being accomplished, but it would be wrong to conclude that there is any room for complacency. This time last year we had high hopes of three major projects—the Bornu Railway Extension, the Bornu Deep Drilling, and the Shiroro Gorge Hydro-Electric Scheme. Now, a year later, the Railway extension has been cancelled and in its place we have a plan for improving the road from Kano to the Tchad territory boundary; the Bornu Deep Drilling continues to be dogged by one misfortune after another; and the Shiroro Gorge scheme still requires much further investigation. It is with this sort of thing in mind, then, that I say there is little room for complacency. On the other hand, the detailed reports of departmental development that I have given you will, I feel sure, convince you that much is being done in a multitude of directions.

The Niger Agricultural Project at Mokwa continues to make sound and steady progress. The year under review represented a critical testing time as many of the settlers were awaiting the results of the first full year's cropping before making up their minds as to the soundness of the scheme. Steady rains at the beginning of the season and their prolongation to the end of October have raised expectations of heavy crops and it is confidently hoped that the settlers are well satisfied with the progress achieved so far. Groundnut yields of over 1,000 lbs per acre have been recorded whilst the ravages of the "stainer bug" on the guinea corn, which proved so devastating in 1950, have been reduced to the minimum by the sowing of a local variety. Of the 1,826 acres cultivated in the first settlement area, 1,144 acres have been devoted to groundnut production, the balance having been put down to guinea corn, bambarra nuts, beans and cotton. It is evident that conditions at Mokwa are suitable to an expansion of bambarra nut production and it is planned to improve the present low standards of cultivation. A total area of 1,476 acres has been cleared for the establishment of the second settlement and a modest start, seventy-five acres, has been made in respect of the third settlement.

Experiments continue to be undertaken in the application of mechanical methods to the various farming operations. It is hoped that

the use of steam engines for cable ploughing will go far towards solving the ploughing difficulties on the established farms.

In September the Niger Agricultural Project welcomed the visit of a Mission sponsored by the Colonial Office which was investigating the mechanical preparation of Rama fibre, and placed buildings, equipment and the production of a special Rama plot at its disposal.

The Kontagora Agricultural Scheme has made steady progress in spite of the inevitable teething troubles, and is now settling into its stride. Three villages have been established and three more are being cleared and built ready for occupation this dry season.

Difficulties are still being experienced with the cattle, but with the assistance of the departments concerned and of W.A.I.T.R. they will certainly be overcome. The N.R.P.D.B. was sufficiently impressed with the work already done and the great potentialities of the Scheme to make further grants totalling £38,000 at its December meeting.

The Shendam Resettlement Scheme is now firmly established. There are seven settlements in the central Block B and with the help of additional staff recently posted to the area old settlements can be consolidated and new ones planned, not only in Block B, but in Blocks A and C as well. During the course of the year political troubles disturbed the atmosphere, but it is hoped that these have been overcome by His Excellency agreeing to the creation of a new separate Native Authority for the Block B resettlement area.

The Jema'a Resettlement Scheme has had a disappointing year. Agricultural conditions are excellent and all possible help has been given to the settlers but the Birum (for whom the scheme has so far been reserved) have shown a peculiar reluctance to take advantage of it, evidenced by the fact that only three settlers came in 1951. Unless the Birum give ample evidence this year that they wish to take up this rich and fertile area, the scheme will be thrown open to other land-hungry farmers in 1953.

The Production Development Board has held two meetings and the Loans Board three meetings since my report last year. The fertiliser vote has been further increased by £450,000. The major portion of this sum is for forward buying for the years 1953 and 1954.

A Production Division of the Department of Agriculture is to be formed and is scheduled to start operations on the 1st of April. By 1955-56 it is expected that there will be seventy-one Production Officers operating in the bush, and to finance this scheme over a period of ten years, £1,500,000 has been earmarked.

Other schemes that should be mentioned are eradication of Kasbin Yawo by biological control (£10,000) and investigations into soil stabilisers, (£15,000).

The Loans Board has approved loans for a fish-farm, markets, weaving and purchase of corn. It has also decided that under normal circumstances Agricultural Loans should be for five years and that the loan would not normally exceed £1,000.

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Education

During the past year there has been steady progress in all spheres of educational activity in the Northern Region. Changing conditions—social, economic and political—have stimulated in all classes a demand for increased educational facilities, and expansion is controlled only by the output of trained teachers. Recruitment of Senior Service staff has been satisfactory, though there is still a number of vacancies; four more Junior Service staff have been promoted Education Officers, making a total of eleven in the North. There is still, however, a shortage of suitably-qualified African teachers to staff the Secondary and Middle Schools and Teacher Training Centres. The Regional Inspectorate, appointments to which are anticipated early in 1952, should ensure co-ordination of effort and an all-round improvement in standards at all levels.

There were two events of major importance during the year, the first being the Report of the Committee appointed to survey comparative standards in schools in the three Regions, as a result of which proposals for a re-orientation of the Middle School system were formulated. The second was the visit of an Educational Study Group, sponsored by the Colonial Office, and under the leadership of Dr Jeffrey, Head of the Institute of Education, London University. The areas visited by the Study Group in the limited time at their disposal enabled them to obtain a general impression of the educational problems with which the Region is confronted, and to discuss these with Government Education Officers and representatives of the Native Authorities and Voluntary Agencies; their recommendations will be of considerable value to those responsible for Education in this Region.

Under the Colonial Development and Welfare Development Plan, all buildings at Zaria Secondary School have now been completed; Mubi Elementary Training Centre is nearing completion; a piped water supply is available at Toro Elementary Training Centre; the two Girls' Training Centres at Maiduguri and Kabba, and the Rural Education Centre at Bauchi should be ready for opening in mid 1952. In order to speed up the building of Keffi Secondary School and Elementary Training Centre, the work has been put out to contract. Development Funds made available to Voluntary Agencies have enabled them to proceed with their programme of Teacher Training and Secondary School expansion. Under the Northern Region Supplementary Plan, progress has been to some extent retarded owing to lack of Public Works Department supervisory staff, but several of the new schools have been opened in temporary quarters.

In the sphere of Primary Education, the staffs of existing schools are being strengthened to meet the requirements of the Grant-in-Aid Regulations. Expansion of the Primary School system, both Native Authority and Voluntary Agency, is conditioned by the output of the Teacher Training Centres; a reasonable dilution with untrained staff is permitted, but it is now generally realised that quality is more important than quantity. Special mention should be made of the successful system of Community Schools in Kabba Province where the Local Communities are building, and often equipping, new schools, the Native Administration supplying the teachers. I am glad to report that in most Provinces the Local Education Committees are playing an increasingly important part in the planned development of Primary Education, and that they have fostered a mutual spirit of understanding between Government, Native Authorities, and Voluntary Agencies. The supervisory staff needs strengthening; for the Native Authority schools, it is hoped to train more Visiting Teachers, and to hold Refresher Courses for a number of present Visiting Teachers, in the near future; the Department is also financing additional supervisory staff for the Voluntary Agencies.

Progress in Secondary education has also been satisfactory. In addition to the almost complete double-stream Government Secondary School at Zaria, the Keffi Government Secondary School—still accommodated in temporary quarters at Kaduna Junction—and Saint John's College (R.C.M.) at Kaduna have now reached Form III, double-stream; Gindiri (S.U.M.) Secondary School is still in its infancy, but has been established on a sound basis; Offa Grammar School, though still short of graduate staff, now has a School Certificate class; and the Sudan Interior Mission has opened a Secondary School, Titcombe College, at Egbe in Kabba Province. An inter Secondary School Sports Meeting was held for the first time at Zaria, Saint John's College being the winners; the object of this Meeting is not only to raise the standard of Athletics in the North, but also to establish friendly relations between the Secondary Schools in the Region.

The number of Northerners at present qualified for post-Secondary education is limited, and most Overseas Scholarships are awarded for the one-year professional Teachers' Course at the Institute of Education, University of London. I am glad to say that good reports have been received on the three teachers who were sent, at the suggestion of Sir Christopher Cox, for a two-year general academic course at Leicester University College. Only a very few Northerners can at present aspire to entry to University College, Ibadan, (where there are now nine in residence) but the number will increase as standards improve at Zaria Secondary School, and when the other Secondary Schools reach School Certificate level. Extra-mural activities are being developed, two Lecturers under the auspices of University College Ibadan operating in the North-West and North-East areas respectively; it is still too early to assess the value of this work, as interest varies in the different centres.

It is encouraging to be able to report that good progress is being made in Teacher Training. The first Secondary Teacher Training Course commences at the Zaria Branch of the Nigerian College in January, and the number of Zaria Secondary School students who have volunteered both for this course and for the Higher Elementary Training Centre, Katsina is very satisfactory. At the latter institution it has now been possible to maintain continuity of staff, the curriculum is settled, and future results should be satisfactory; in the first output there was a number of failures in the examination, but they had worked under very difficult conditions. For the first time for some years there is a good field for recruitment to Bauchi and Katsina Elementary Training Centres. The "Bridge Course", which was organised to enable Vernacular Certificated teachers to qualify for the Elementary Teachers Certificate, has proved a success, and a similar course is being arranged for 1952-53. Most of the Voluntary Agency Training Centres are now approaching full output at the Elementary Certificate level; and expansion of their Higher Elementary Training Centres is proceeding according to schedule. The Department has given much thought to the future lines of development of Teacher Training policy in the Northern Region, and the Chief Inspector of Education, together with the Education Officer i/c Bauchi Elementary Training Centre and Shettima Kashim, Education Officer Bornu Native Authority, visited the Bakht-er-Ruda Training Centre in the Sudan, to study organisation and methods there. A special conference was convened at Kaduna in January 1952 to discuss these problems.

In girls' education progress has been steady, if not spectacular. The first three Moslem women from the far North have achieved their Elementary Teacher's Certificates; two new Training Centres have been built, and are to be opened in mid 1952; one more Provincial Girls' School is nearly completed, and plans are advanced for the building of the first Government Girls' Secondary School for the North. Kano, Sokoto, and the two Mission Training Centres have passed out more than forty qualified teachers; a second Mission Secondary School has been opened in Kano, and a new school for indigenous girls has been opened by the Roman Catholic Mission in Plateau Province at Zawan.

In August, as an attempt to train African women for positions of responsibility, the first Headmistresses' Course was held in Kaduna. Twenty headmistresses and senior members of school staffs from all over the territory attended, and showed their quality in a strenuous ten days of activity.

Women's classes continue to be popular, and many more could be opened if staff were available to run them. Recruits for Adult Work, and for Domestic Science, are still few, though an adequate supply of expatriate teachers is forthcoming for other types of work.

Under the stimulus of an efficient Trainer, Guiding and other forms of informal education are expanding. New companies have been

opened in districts in which girls have hitherto been shy of appearing even to enjoy themselves, and this is symbolic of a general stirring among women all over the North.

Technical Education has now been virtually regionalised in the North, and the appointment of a Chief Inspector of Education (Technical) has resulted in a general speeding-up of development.

Satisfactory progress has been made towards the completion of the building construction programme at the Trade Centres at Kaduna, Bukuru and Kano. There have been unavoidable delays and difficulties due to scarcity of skilled labour, intermittent shortages of essential materials, etc., and excessive rains: in spite of these set-backs however the completion of current projects according to schedule is being pressed with justifiable optimism.

Good progress has also been made in the construction, renovation and modernisation of Middle School Handicraft Centres at Kano, Zaria, Yola and Sokoto, and additional provision and preliminary arrangements have been made in the current schedule to proceed with Centres at Bida and Ilorin.

The Trade Centre, Kaduna, now in its sixth year of operation, turned out forty-two skilled tradesmen who completed their apprenticeship in the Trades of General Mechanic, Carpentry and Bricklaying, all of whom qualified and were awarded Certificates of Apprenticeship. It is gratifying to record that before leaving the Trade Centre all of them were placed in employment. Government Departments and industry benefitted accordingly; more apprentices would undoubtedly have accepted employment with their Native Administrations had the terms offered been more closely related to their qualifications. As one of the main objects of technical training in this Region is to build up a body of skilled Northern artisans, the creation of which is essential to the development of the country, it is hoped that Native Authorities will in future offer sufficiently generous salaries to the products of the Trade Centres, thereby attracting the best men.

Adult Education, under the general direction of the Regional Adult Education Officer, assisted by Special Duty Officers in the Provinces, has made further advances during the year; many new classes have been opened, and the sale of vernacular literature has increased. A Committee has been appointed to co-ordinate the activities of the various agencies engaged on Adult Education work, and the setting up of a Regional Literature Committee is under consideration. Two outstanding problems are the production of vernacular literature on a much wider scale, and distribution.

Finance

The remarkable expansion in the revenues of Nigeria has continued throughout 1951. This has been largely the result of world conditions, including the rearmament programmes of the Western democracies,

which have maintained, and in some cases increased, the high prices prevailing for Nigeria's primary products. In these circumstances the Central Government was able to make the Region its biggest allocation of revenue since the inception of the Richards Constitution. The allocation of £3,727,180 was £643,180 more than that made in the previous year and as a result of this marked increase in revenue, the Region was able to budget for a surplus of £151,704, or approximately four and a half per cent of its total revenue.

Over recent years the Region has built up substantial surplus balances which have been credited to a Revenue Balance Account where they are available for capital expenditure. In 1948-49 the Region saved nearly half a million pounds, in 1949-50 a further quarter of a million pounds and in 1950-51 more than a quarter of a million pounds. So that at the beginning of the financial year 1951-52 the Region had an accumulated surplus balance of over one million pounds. It must, however, be remembered that these savings reflect in large measure the shortage of materials and skilled personnel required for the implementation of the Region's heavy programme of capital works.

It will be remembered that in August 1950 an expert Commission visited the North during its investigation of the financial relationship of the Centre and the Regions. The Report of this Committee was published in April 1951 and it was subsequently considered by a Committee of Sixteen, comprising representatives of the three Regions and of Lagos, which met under the Chairmanship of the Financial Secretary. The Report of this Committee to His Excellency the Governor was considered by Government and recommendations were made to the Secretary of State. These recommendations, which received the approval of His Majesty the King, were embodied in the Nigeria (Revenue Allocation) Order in Council which was published on the 7th of December, 1951.

The Revenue Allocation Commission's plan was designed to provide the Regions with revenues of their own and with an allocation from the revenues of the Nigerian Government, to be based on the three principles of Derivation, of Needs and of National Interest. The most important arrangements which the Commission proposed may be summarised as follows:—

- (a) Certain local revenues (including nearly all the Revenue Declared Regional under the old Revenue Allocation arrangements) should be handed over to complete Regional control with the Regional Governments having power to fix such rates of tax as they thought fit. In addition the import duty on motor spirit should be replaced by Regional sales taxes.
- (b) One-half of the revenue from taxes imposed by the Government of Nigeria on Tobacco and Cigarettes should be allocated to the Regions in accordance with the Regional consumption of the Tobacco product thus taxed.
- (c) An annual grant, based on the population of each Region, should be made from Nigerian Government revenues.

- (d) Annual grants should be made to the Regions in reimbursement of the expenditure incurred by them on the Nigeria Police and on educational grants-in-aid (other than special purposes grants) and in partial reimbursement of expenditure on Native Administration Police within the Regions.
- (e) A "once-for-all" grant of the order of £2,000,000 should be made to the Northern Region with a view to remedying the serious under-equipment of the North in respect of public works and public buildings and in particular of educational institutions.

Although the Committee of Sixteen agreed with the general principles of the Revenue Allocation Commission's plan, it proposed that the whole of the tobacco revenues should be allocated to the Regions and that the North's "once-for-all" grant should be increased to £3,000,000. The Government of Nigeria, was, however, unable to accept these proposals since not only would they have conferred a disproportionate benefit on one Region at the expense of the others and of the Central Government, but they would have upset the careful system of balanced allocation recommended by the Commission. The Nigeria (Revenue Allocation) Order in Council, 1951, was therefore closely in accord with the Commission's proposals. The new scheme of revenue allocation has been generally welcomed in the Region as a reasonably satisfactory solution of an extremely complex problem: the recognition of the serious under-equipment of the North in the field of social services by the payment of the "once-for-all" grant of £2,000,000 has also been welcomed.

In 1950-51 the Native Authorities further increased their Reserve Funds by £51,400 the total being about £4,311,000 or £480,000 more than the estimate. This increase, which is only a quarter as high as in 1949-50, reflects the fact that the difficulties in carrying out the large-scale development works projected by Native Authorities have decreased considerably in the past year—though lack of trained supervisory staff still seriously retards progress.

In 1951-52 the estimated surplus of Ordinary Revenue over Recurrent Expenditure is £394,200 or 11.6 per cent. The estimated capital expenditure is £945,900 towards which £229,800 is received in grants from Government and other sources. If the full programme is completed this will involve a withdrawal of £438,000 from Reserve Funds.

The Temporary Addition to Rates of Pay continues to be reimbursed from Government Funds, no part of this burden as yet falling directly on Native Administration financial resources although it is not intended that this arrangement should continue indefinitely. A revision of the grant-in-aid system which is now in preparation should provide for its elimination in 1953-54. Native Treasury Development Plans are now in their third year and the effect of this activity together with increasing grants and loans from the Production and Loans Boards is

being felt all over the Region. At the same time Native Treasuries are building up satisfactory reserves to be expended during the next development period.

Forestry

The Forest Estate was increased by 904 square miles of new reserves, and reserves in the process of constitution total 1,800 square miles, many of which await gazetting. In addition the consolidation of existing reserves was continued. To-date, only 6 per cent of the total area of the Region has been reserved and the creation of an adequate Forest Estate will remain for many years the main task of the Department. This is a slow and unspectacular task and is often unpopular. The Communal Forest Areas were increased by twenty-nine square miles during the year.

The only timber concessionaire in the Region working in the Sanga River Reserve in Plateau Province has increased the output of his sawmill to satisfy the demand for mining timber. Exploitation in this reserve is controlled by the Department and there is no fear of over cutting.

In the Tiv Division the demand for trees from the nurseries for village plantations continues to increase and 600,000 young plants were distributed to householders.

The Senior Service staff position has improved but numbers are still inadequate and it has not been found possible to post an officer to every Province. Without staff the acquisition of an adequate Forest Estate in the form of legally constituted reserves will take a long time.

The first Northerner to be awarded a scholarship in the United Kingdom has returned after completion of a course which it is hoped will enable him to enter the Senior Service.

Geological Survey

Geological mapping of the coal measures has been continued in Idoma Division and in Igula Division, and is now in progress close to the Benue River near Dekina. Core drilling, both on contract and with a departmental machine, is in progress at Orukram to prove the underground extent and quality of the previously mapped 7 foot seam. A team has continued systematic geological mapping of the Cretaceous rocks around the confluence of the Gongola and Benue Rivers, and in the course of a water supply investigation a reconnaissance survey was carried up the Benue to the French border. Mapping of the iron ores of the Lokoja and Koton Karifi areas has been put in hand with the object of drawing up a drilling programme to evaluate the reserves and grade of ore present.

A branch office of the Department has been maintained in Jos, where in addition to day to day advice on mining geology, work has been largely concentrated on the occurrence of columbite. Close co-

operation has been maintained with A.O. Nigeria Limited in their lead-zinc prospecting north of the Benue River. Hydrological investigation has continued to feature largely in departmental activities and advice has been given in the location of well, borehole, and reservoir sites.

A Conference of Directors of West African Geological Surveys was held at Jos in February under the chairmanship of the Chief Secretary, West African Council, and was attended by delegates and observers from British and French West African Colonies and from the United Kingdom and France.

Labour

The Northern Regional activities of the Department were extended by the appointment to the Regional Office, Kaduna, of a Labour Officer (Trade Unions), and for a period a Labour Inspector to the Jos Labour Office, the main duties of the Labour Inspector being to carry out inspections under the Fair Wages Clause in the Jos area.

The Labour Officers at Jos, Kano and Minna, working under the control of the Senior Labour Officer, continue to be responsible for the work of the Department in their districts, and the Employment Exchange at Jos serving the Plateau Province deals with the registration of employed and unemployed workers and the filling of vacancies notified by employers. As the work connected with the resettlement of ex-servicemen decreased all outstation resettlement offices with the exception of those at Jos, Kaduna, Kano and Minna were closed down. The number of ex-servicemen on the Live Registers in the Northern Provinces had fallen to 431 at the end of November.

Labour Officers continue to advise employers and workers regarding the statutory requirements affecting labour and carry out inspections of industrial and other establishments.

In the districts scheduled as labour health areas, labour camps were inspected to ensure compliance with the Labour Health Areas Regulations. These Regulations are being redrafted, and in order to bring to light any practical difficulties or anomalies consultations are proceeding with officers of the Administration, Medical Officers, employers and trade union representatives. During November the Commissioner of Labour visited Jos to continue the discussions and to obtain first hand information in one of the areas most concerned.

Thirteen trade disputes were notified up to the end of November. Of these, eleven involved stoppage of work for periods from one hour to two days. In two of the disputes the workers concerned were dismissed and in the other cases settlement was reached with the help of Labour Officers. Throughout Nigeria the "go-slow" of the locomotive drivers which started at midnight on 9th December, continued until after Christmas.

The Labour Officer (Trade Unions) posted to the Northern Region is chiefly concerned with advice and guidance to union officials and members on functions, organisation and procedure. It is hoped that the considerable trade union experience of this officer will help towards a better understanding of the conduct of union affairs and the accompanying responsibilities. In addition to general contact with individual organisations, talks have been and will continue to be given to trade union representatives. Broadcasts explaining the functions and responsibilities of trade unions are also being arranged.

Delegates of the International Confederation of Free Trade Unions visited Jos and Kano where opportunities were afforded for them to meet employers and representatives of trade unions and to visit industrial establishments.

In September, Mr Carruthers, Whitley Council Adviser of the Ministry of Labour and National Service, gave an address on Whitley Council methods and procedure to about 150 members of trade unions operating in Kaduna. During November the Labour Officer (Training) from the Central Office, Lagos, presented a condensed version of the Training Within Industry programme to senior officers of the Secretariat and representatives of other Government departments.

Consideration is being given to the extension of Trade Testing of skilled artisans. At present, so far as concerns the Trade Testers of the Department of Labour, this is confined to the testing of unemployed workers. The possibilities of extending to include the testing of those in employment and the issue of a generally accepted certificate of competence are being explored.

Provincial Wage Committees met periodically to review the effect of the cost of living on the rates of pay of daily-rated workers and in several cases recommendations for upgrading were approved.

Legal

In so far as the activities of the Legal Department attached to the Northern Region are concerned, it would be true to say that, in addition to the normal work of the department much time and thought has been directed to the satisfactory solution of the complicated technical legal problems inherent in the constitutional changes brought about by the Nigeria (Constitution) Order in Council, 1951.

Probably in no Region have these problems presented such difficulty, and yet the smoothness with which the elections have been conducted and all the changes brought about is a happy indication of the manner in which the peculiar difficulties obtaining in the Northern Region have been met by the constitutional legislation.

The new office of Legal Secretary was created by the Nigeria (Constitution) Order in Council, 1951, and with a view to the extra burdens that will inevitably be imposed upon the department as a

result of the constitutional changes, two Crown Counsels in addition to the Legal Secretary will, it is hoped, be permanently stationed in the Region in future—one as heretofore in Kaduna, and the other at Jos to take charge of the Legal work emanating from Adamawa, Bornu, Bauchi, Benue and Plateau Provinces. The office at Jos was opened in November 1951.

Despite unavoidable shortage of staff in 1951 it has been possible for Crown Counsel personally to conduct a large number of the more important criminal prosecutions and other litigation on behalf of Government. An example of this was the appearance of the Acting Senior Crown Counsel before the El Dunia Fire Commission in Kano in May and June 1951.

Marine

There have been no major developments in this department during the year. Normal activities have continued and include the operation and maintenance from Lokoja of two Diesel launches, two vehicle lighters and ten poling barges. The vehicle ferries "Shanahan" and "Oloma" have both been overhauled at Lokoja, the former having new engines installed, and one new poling barge is under construction. New buoys are under construction for use, when required, in the Rocky section of the Niger River which has been buoyed adequately throughout the year. The River Benue was cleared of snags by a Waterway Party in June and July for a distance of over 500 miles.

Medical and Health

This is the first year of the revised Five Year Plan, and the past twelve months have seen a continuance of many building projects of the Medical Department carried on from previous years.

The new Birnin Kebbi Hospital though finished is not yet in use, as the Junior Staff quarters are still uncompleted and an adequate water supply has not yet been made available.

The re-building and extensions of Bauchi Hospital are near completion, and several of the new buildings, including Junior Staff quarters, have been occupied. It is hoped that the building programme will be completed by the end of the financial year.

Work on re-building the Lokoja Hospital on a new site has started and is progressing well.

The new hospital at Mubi in Trust Territory of Adamawa Province has begun to take shape and should be completed in another twelve months' time.

New wards have been built at Offa and also at the Maiduguri and Jos Infectious Diseases Hospitals, while new Operating Theatres with X-Ray rooms attached have been completed or are nearing completion at Kafanchan, Maiduguri and Katsina. Other essential Hospital

buildings such as Maternity wards, Administrative and Out-Patient blocks, Isolation wards, and Junior Staff quarters are in hand, or have been completed, at Kano, Kafanchan and Yola. Zaria General Hospital is being provided with water-borne sanitation.

Work on the Mission Hospitals at Bambur, Numan and Lassa is steadily progressing, while Mkar Hospital has added a Maternity ward to its already extensive medical facilities.

Work on the three "Combined" Hospitals at Oturkpo, Shendam and Nguru scheduled to begin this year has unfortunately not yet begun although funds are available and building sites approved.

Hadejia Native Administration Hospital became a Government responsibility in April 1951, while Idah Native Administration Hospital is being taken over in April 1952.

The Rural Health Centre at Kankiya in Katsina Province has now been completed but quarters for the Medical Officer and the Health Sister remain to be built. The building of a second Rural Health Centre has been started at Argungu in Sokoto Province and this will be a replica of the one at Kankiya.

Except for a few minor items the new Dental Centre at Kano has been completed.

Katsina Native Administration has erected a new building (Health Office and Vital Statistics Office). Sokoto Native Administration has erected a Hostel for females training as Nurses and Health Visitors at Sokoto Hospital.

The situation as regards Medical Officers has improved in recent months. Kano Hospital now has the services of a Surgical Specialist, and Special Grade Medical Officers (Clinical) have been posted to Kano and Jos.

Hospitals at Maiduguri, Sokoto, Katsina and Jos have two Medical Officers each, while Touring Medical Officers will shortly be posted to a few Provinces as soon as quarters are provided.

A Medical Officer who has recently taken a course in Ophthalmology is now in Plateau Province undertaking a preliminary survey into Eye Diseases. It is proposed to build an Eye Clinic at Jos which will eventually develop into an Eye Hospital for the Region.

The appointment of Health Sisters (one for every Province in the North) is complete, and already some of them have carried out valuable work in the rural areas.

A Sister Tutor (Midwifery) has recently arrived in Kaduna to start the training of Grade I Midwives.

The situation as regards Nursing Sisters is still unsatisfactory, although it has been possible to post one to the new Bauchi Hospital for the first time. The extensions to existing hospitals make the need

for more Nursing Sisters imperative. Shortage of female nurses and midwives is still acutely felt, and it will be some years before the situation can be expected to improve.

In the early part of 1951 sixteen new ambulances were received in the Region. Five of these were purchased by various Native Administrations (two by Sokoto, and one each by Kano, Adamawa and Yauri); the remainder were allocated to hospitals at Kaduna, Zaria, Birnin Kebbi, Katsina, Maiduguri, Horin, Offa, Bida, Idah, Hadejia and Kafanchan. Five more ambulances have now arrived. Two are being reserved for the new hospitals at Keffi and Mubi, while the other three are being offered to various Native Administrations for use in the rural areas. If any are not taken up they will be used as replacements by this department.

It is pleasant to record that the Nigeria Central Council Branch of the British Red Cross Society presented an ambulance to the Medical Department of the Northern Region for work in the Northern Provinces. At present this vehicle is touring Zaria Province in the charge of a Health Sister. Later it will tour all the other Provinces in the Region.

Electric lighting sets have been allocated to Bida, Minna, Birnin Kebbi, Gusau, Makurdi, Wukari, Hadejia, Bauchi and Kafanchan Hospitals. None of these sets are yet installed owing to various difficulties which have arisen, the main one being shortage of copper wiring. Operators have been engaged and are in training at the moment. The X-Ray sets for the above-mentioned hospitals, which became available in 1950, cannot be put into operation until the lighting plants are working.

Final approval for the Assistant Medical Training School at Kano is still awaited from the Secretary of State. A Principal has already been appointed and is in residence in Kano. Some equipment from the old Medical School at Yaba is available. Once approval of the scheme is obtained it is hoped to start training candidates without waiting for buildings to be completed by utilising as a temporary measure some of the buildings of the new Infectious Diseases Hospital in Kano City.

Work has at last started on the new Nurses' School and Hostel for Nurses, Dispensary Attendants and Midwives at Kano, and it is hoped that the buildings will be completed in a few months' time. Unfortunately the equipment ordered nearly twelve months ago is rather slow in arriving. Twenty-three students out of thirty-three were successful in the March examination while another three passed the October examination. At present there are thirty students (thirteen Government and seventeen Native Administration).

A new laboratory block was completed at the School of Pharmacy, Zaria, in 1950, while two Northern Type Quarters for Junior Service Staff were erected in 1951. The new Hostel has been completed and

twenty-six students are in residence. Following a three-year course students may qualify as Dispensers (Northern Certificate). During 1951 nine students obtained this qualification.

The Northern Region during the past five Dry Seasons has become accustomed to the appearance of epidemics of meningitis, smallpox and relapsing fever on a vast scale, culminating with the epidemic of meningitis in 1950, when in the first six months of the year a total of 92,961 cases were reported with 18,153 deaths. It is gratifying to record that 1951 has been comparatively free of epidemics, although minor outbreaks did occur in localised areas.

Severe localised epidemics of cerebro spinal meningitis were reported from Pankshin, Bauchi Province, and Adamawa, Katsina and Kano Provinces also reported a marked number of cases, but in the rest of the Region only sporadic cases and minor outbreaks occurred. In all areas the local staff were able to deal with the situation and the Field Units were not called upon for aid. The total number of cases reported in the Region up to the end of November was 9,353 with 1,390 deaths.

Jos and Bukuru areas had a sharp outbreak of smallpox with 408 cases and seventy-seven deaths. Other areas reporting mild outbreaks were Pankshin, Azare, Yola, Kano, Wukari, Maiduguri and Bauchi. Vigorous vaccination campaigns were undertaken in the areas affected. The total number of cases reported in the Region up to the end of November was 7,402 with 1,465 deaths.

Katsina again was the only Province which reported an epidemic of relapsing fever. A total of 315 cases with seven deaths occurred.

A mysterious epidemic occurred on the Plateau in the months of September and October among the Pagans living in the northern part of the Province. The onset of the disease was sudden, prostration severe and jaundice marked; death occurred between four to seven days. Yellow Fever and other forms of infectious diseases causing Jaundice were ruled out by investigations and it is now assumed that the epidemic was due to food intoxication of unknown origin. Samples of the staple diet have been flown to the United Kingdom for further investigation. It was not found possible to count the number of cases which occurred, but it is estimated that the disease carried a 50 per cent mortality. For want of a firm diagnosis the disease has been referred to as Jos Jaundice.

The Abolition of Private Practice and the revised Hospital Fees Regulations came into effect on 1st April. Several Hospitals have reported a falling off of out-patient attendances due to the new minimum fee of 6d authorised under the Regulations.

During the year the Director of Medical Services asked for a Rural Health Service to be organised on a Regional basis

under the control of the Regional Senior Health Officer. Details of the Scheme have yet to be worked out but it is proposed that the Medical Field Unit and existing local Native Administration organisations will form the foundations on which the new Service will be built. The provision of a Touring Medical Officer and Health Sister to each Province will allow the Scheme to be worked at Provincial level. Katsina Province has been provisionally selected for a P. of Scheme.

The Existing Medical Facilities in the Region are as follows:-

Government	Hospitals		Dispensaries		Maternity Homes	
	Native Administration	Mission	Native Administration	Mission	Native Administration	Mission
20	7	10	302	86	—	7

For some weeks only one full-time Medical Officer was available for field work for both the Sleeping Sickness Service and the Field Units, and work had to be largely restricted to vaccinations and other routine duties. The staff situation in this service has since improved considerably. Each of the four Medical Field Units in Sokoto, Bornu, Plateau and Benue now has a Medical Officer. All units are undertaking surveys to estimate the incidence of and the damage caused by the more important epidemic diseases, such as malaria, venereal diseases, bilharzia, worm infestations, food deficiencies and anaemia. Only on accurate knowledge acquired from many such surveys can a balanced rural health service be planned. Units are now undertaking or planning environmental hygiene in selected areas.

Valuable assistance has been given by Dr E. G. Berry, a malacologist loaned through E.C.A. from the United States' Public Health Service for the study of the molluscae of the Region.

The control of sleeping sickness by means of treatment and prophylactic drugs has continued. Since January, about 600,000 people have been examined by teams and individual dispensary attendants, and 2,000 new cases diagnosed. A fresh occurrence of sleeping sickness was detected in the eastern part of Kano Province and about 20,000 people have so far been examined in Mallamaduri and Auyo districts of Hadejia Emirate. In the Salau and Rahama districts of Bauchi infection rates seem to be increasing, probably because of the numerous mining enterprises which have been recently established. This situation has been investigated and surveys are shortly to be started. In Jama'a division of Plateau Province timber extraction undertakings have added to the hazards of labour communities in terms of sleeping sickness infection, and appropriate measures have been taken. Elsewhere in the Northern Provinces constant vigilance has been exercised in the rapid detection and

treatment of cases, and the prevention of the spread of the disease. Recruitment of tsetse control staff improved at the end of 1950 and with the aid of £5,000 allocated by the Production Development Board, a total of 180 miles of stream was cleared. The bulk of this work was done in neighbouring parts of Katsina, Zaria and Kano, mainly on the head waters of the Challawa and Shika river systems. The lower reaches of the latter have permanent flowing water and every effort is being made by the Native Authority and the departments concerned to have the reclaimed valleys properly utilised for grazing and irrigated farming. Another thirty-five square miles have been made tsetse-free near Gboko, where numbers of Zebu cattle are now able to remain throughout the year. Clearance on a small scale was done near Kafanchan, in the Lere District of Zaria, and at the settlements in Kontagora and Shendam. A second entomologist has been recruited and is engaged on investigations in connection with possible development schemes in Bauchi Province. An application to the Production Development Board for £77,000 for eradication of tsetse has been approved.

Meteorological Service

The Nigerian Meteorological Service forms part of the British West African Meteorological Services, and is under the control of the Director, British West African Meteorological Services, who is stationed in Lagos.

There is a Meteorological Forecast Office at Kano Aerodrome, which was normally staffed by four Assistant Meteorologists and fifteen Junior Staff. Meteorological reporting stations were maintained at Ilorin, Minna, Kaduna, Potiskum, Maiduguri, Jos, Yola, Makurdi and Lokoja on a twenty-four hour basis, each station being staffed by four or sometimes five junior staff; reporting stations on a twelve hour basis were maintained at Sokoto, Katsina, Yelwa, Bida, Bauchi, Ibi and Nguru, each station being manned by two junior staff.

The Meteorological reporting stations make continuous observations of meteorological elements, and send coded weather reports at hourly intervals to the forecast offices, and when necessary direct to aircraft.

The Forecast Office at Kano receives weather reports covering a great part of Africa and parts of southern Europe, and prepares maps of weather at three hourly intervals. On the basis of these maps, forecasts of the weather likely to be experienced during flight are issued to all aircraft departing from Kano, and aircraft in flight over certain sections of routes are warned of adverse weather in their path. Wireless broadcasts of meteorological observations in Northern Nigeria and the adjacent areas are made for the use of other meteorological Services and for aircraft.

Building of offices and quarters from a grant under the Colonial Development and Welfare Scheme was continued; one more Senior Staff quarter was completed at Kano; Junior Staff quarters were completed at Potiskum, Yelwa, Sokoto, Ibi and Makurdi.

Mines

During the first eleven months of 1951, 10,682 tons of tin concentrates were produced: this was comparable with the output of 10,383 tons for the same period last year. As in 1950, an abnormal water shortage on the Plateau led to a reduction in the scope of mining operations at the beginning of the year through lack of water and interruption of power supply from the hydro-electric installations of the Nigerian Electricity Supply Corporation, Ltd. This power shortage continued through the second quarter of the year and resulted in the shutting down of much electrical mining plant.

There was an appreciable increase in the number of applications both for mining leases and exclusive prospecting licences during the year. The number of operators remained approximately the same but the tendency for individuals to form small limited companies continued. An average number of approximately 61,500 persons was employed in mining in the Region.

Attention has been turned to the problem of extraction of tin ore in the deep leads underlying the basalt areas and to ensure that this is done in an efficient orderly manner, the area of the Kassa basalt flow was closed to prospecting under Public Notice No. 16 of 1951, while the greater part of the remaining basalt flows not already covered by mining titles are covered by applications for Special Exclusive Prospecting Licences by the Colonial Development Corporation and other companies. The problem of mining the deposits when proved remains to be solved. A shaft sunk by one of the larger companies to effect entry to the N'Gell deposits has been abandoned but another attempt is to be made at a different site.

The underground prospecting of the cassiterite bearing lode on the escarpment near Katab in Zaria Province, the surface indications of which were very promising has, as yet, not been encouraging.

No new tin bearing areas were discovered during the year, but the high price of tin led to increased activity in areas where tin ore was known to occur as in Bauchi Province and the Odegi area of Benue Province.

The price of tin continued its rapid upward rise into February 1951 to an unprecedented peak price of over £1,600 per ton and then fell almost as dramatically to half of this price by August. Since then the price has risen and it is now steady around £950 per ton. Concomitant with the increase in price of tin, costs of production have risen sharply and problems of increasing efficiency in mining and the extraction of ore from the wash have become more urgent. Thus one major company intends to spend a sum in excess of £350,000 on Euclid earth moving equipment for the better mechanical exploitation of suitable deposits and is also experimenting on the use of mechanical jigs to effect a more complete separation of the ore from the wash.

The illegal traffic in tin concentrates on the Plateau was again of serious proportions and everything possible was done to check this so far as the limited staff position of the Mines Department allowed.

The expanding use of columbium in the manufacture of heat resisting steel has led to an increased demand and price for columbite. The output of 990 tons for the first eleven months of 1951, shows a pronounced increase of 191 tons over the same period last year. No large orebodies of columbite have yet been found, but recent prospecting in some areas has indicated that the bed-rock may contain columbite as an accessory mineral in such proportions as to be economic. Consequent upon the increased price, rates of royalty on columbium ore were increased by Public Notice No 12, 1951. A greatly enhanced price for wolfram has led to more interest in this mineral though production was still low at eighteen tons.

Production of gold, practically all from Niger Province, was very low at 113 ozs. for the first eleven months of the year. This was due to the much greater interest being shown in other minerals. Prospecting for gold in a Special Exclusive Prospecting Licence along the Niger river north of Jebba has been continued by one of the Plateau tin mining companies.

Lead production has been limited to the customary taking in the Zuru area; but prospecting has been continued in Special Exclusive Prospecting Licences in Benue, Plateau, Adamawa and Bauchi Provinces. Results in parts of the area showed promise and justify more detailed work.

A small amount of drilling was done on the coal occurrence in Benue Province near Orukram. One hole showed a thickness of 7 feet of coal at a depth of 265 feet but much remains to be done.

The staff situation of the Mines Department is serious; with the loss of officers by resignations and retirement it is difficult to fill all the senior executive posts in the Northern Region. There is a complete failure to recruit younger men to the Department and this precludes the building up of the cadre of young officers so essential for the maintenance of an efficient department.

The Mines Department School at Jos expanded its activities and besides giving courses of instruction for members of the Mines Department Junior Technical Staff, gave short courses adapted for the requirements of Administration and Ranger and for Geological Assistants of the Geological Survey Department as well as special courses for Junior Technical Staff prior to their proceeding to the United Kingdom on scholarships. Arrangements are now being made for the introduction of two further courses one a two months prospectors course and the other a course for mining assistants of six or twelve months duration for members of the public.

It is encouraging to report that three further members of the Mines Department Junior Technical Staff have been granted scholarships for the study of mining engineering in the United Kingdom.

Police

I am glad to report another decrease in serious crime throughout the Region. The statistics for petty crime investigated by the Nigeria Police, however, continue to show an upward trend. The main cause of this seems to be the rapid growth of towns and the consequent larger areas for the Police to patrol. There has been more political activity in the North than last year particularly at Kano, and three persons were charged and convicted for sedition. No Police were sent out of the Region to assist detachments in either the Western or Eastern Regions. A few extra police however were drafted to the Kabba Province to deal with a minor disturbance there.

Accommodation for the Nigeria Police is still unsatisfactory in many stations, although it is steadily being remedied. Plans are now in hand to accelerate buildings and generally to improve the housing position.

The efficiency of the Native Authorities Police Force is improving steadily. Those at Kano and Jos have had the benefit of supervision by Superior Police Officers for some years. The co-operation between the Nigeria Police Force and the Native Authorities Police elsewhere has been as smooth as ever. In Kano, the mounted section of twenty-eight men, in charge of a sergeant, have proved invaluable for controlling crowds.

The Northern Police College maintained its high standard and a new training programme was introduced. The appointment of a Chief Inspector enabled a close check to be kept on the progress of each recruit. The standard of education required to enter the College has limited the numbers admitted, but 379 recruits passed out of the College during the year. The training of a limited number of Native Authorities Police continued and great benefit has been felt as a result. It is hoped early this year to start classes for boys in English and general knowledge and this will no doubt raise the standard of recruits in the future.

The Refresher Course School for the North, of five separate classes of various ranks began its full function as a training school on 1st April, 1951. Each course lasts five months and there is a turnover of twenty-six men a month.

A successful combined Military and Police Tattoo was held on the College ground in November. It was viewed by a large crowd who appreciated its novelty. A sum of over £80 was collected and paid to the British Empire Society Fund for the Blind, to be used in the Northern Region.

The four detachments of the Motor Traffic Unit at Kano, Jos, Zaria and Horin have patrolled the main highways causing a slow improve-

ment in driving standards. It is hoped that the recent publication of the Road Traffic Regulations in Hausa will be a further help to drivers and Native Authority Police. There are two Vehicle Inspection Officers, one at Kano and one at Jos. Their work has encouraged a greater number of transport owners to keep their vehicles in good order.

A valuable innovation has been an Immigration Officer at Kano with a full-time Assistant Immigration Officer.

Since the last Budget Session, Wireless stations have been built at most of the important centres and are awaiting the installation of Wireless equipment.

I am particularly happy to be able to record that the first Northerner in the Nigeria Police was promoted to the Senior Service during the year.

Posts and Telegraphs

New Post Offices were built and occupied at Katsina, Bukuru and Potiskum and new Postal Agencies have been opened at Akerrri, Bajoga and Kutura. New agencies have also been approved, but not yet opened, at eight further places and applications for another seven agencies are under investigation. The delay in the opening of approved agencies has been caused by the scarcity of essential fittings and equipment and so far as the agencies under investigation are concerned, considerable difficulty is experienced in some cases in obtaining the services of suitable agents.

The extension of telephone trunk services to Sokoto has been completed and an intermediate telephone call office was opened during the year at Talata Mafara. Carrier telephone working has been extended to Oshogbo and Lagos. A new telegraph circuit between Kano and Ibadan was introduced and duplex working has started between Kano and Nguru. A teleprinter circuit from Kaduna to Lagos was opened in December and is working satisfactorily. The installation of a new exchange at Kano has just been started and the switchboard extension at Kaduna, which will cater for more lines, has been partially completed.

Statistics reveal an increase in all classes of postal business, and in addition to the new telephone-telegraph services already mentioned new or improved mail services have been introduced at a number of places. In addition direct despatches have been started to accelerate the despatch of correspondence and parcels between Kaduna and Birnin Kebbi, Gusau, Sokoto and Kaura Namoda.

Printing and Stationery

In common with all Presses in the country the Kaduna office suffered serious difficulty from an acute shortage of paper, which was brought about by supply difficulties in the United Kingdom. It was

only with the greatest difficulty that it was found possible to maintain supplies of books and forms to all departments at the beginning of the year. The plant is gradually being built up to cope with the ever-increasing demands of the Region, and the installation of a battery of Monotype typesetting machines has given better facilities for producing Reports and other official publications. During the year the extension for the new pressroom was wired-up and the machinery has been moved from the old building. Three more presses are expected in the next few months and the capacity of the works will be increased accordingly.

During the twelve months ended 30th September, 1951, over a thousand jobs were dealt with, using twenty-five tons of paper which produced approximately 1,277,000 forms and pages, necessitating 2,054,000 impressions from the machines. It is expected that in future even greater demands will be made upon the Press and Members will appreciate that work in connection with the Regional Houses alone will constitute a formidable commitment.

A small Typewriter Repair Depot will be opened at the beginning of 1952 where simple repair and maintenance work will be carried out, while major work of renovation and intricate repair will continue to be done at Apapa. A Stationery Supply Depot has been opened during the year and will prove of increasing advantage to the Region as the supply position improves and more regular and plentiful deliveries become available.

Prisons

The only Government prisons in the Region now are those at Kaduna and Jos. Treatment of offenders at these prisons continues in accordance with modern practice and is aimed at the reformation of the character and the eventual return of the offender as a useful member of society. During the period under review discipline has been well maintained and no incidents of a serious nature arose.

Owing to staff difficulties it has unfortunately not been possible to provide a relief for the Inspector of Prisons who went on leave in April, and the inspection of the fifty-six Native Administration prisons in the Region, which Native Authorities have found so helpful in the past, has therefore temporarily lapsed. Every effort will be made however to post an Inspector to the Region as soon as possible.

A steady improvement in the conditions of service of Government Warders has been maintained and consultations have been held between the Director of Prisons and the Warders' Welfare Board. Much-needed staff quarters will shortly be erected at Kaduna and it is hoped that work on a proposed block of flats for the prison staff of Jos will be put in hand early next year.

Training facilities were again made available to Native Authority Warders, fifty-two of whom attended courses during the year at the Warders' Training Depot, Eungu.

Both the Kaduna and the Jos Government Prisons now have well stocked libraries and their amenities such as the Earnings Scheme and Educational Classes are much appreciated. The Earnings Scheme has been found to be an excellent incentive to good conduct.

Construction of the Minimum Security Prison at Kakuri, near Kaduna, has proceeded satisfactorily and a number of buildings are now complete. The first fifty prisoners, mostly tradesmen, will be transferred there shortly to continue the building programme. This prison is designed to hold 500 prisoners; 300 acres of land have been set aside and it is intended that the inmates will eventually cultivate this land with a view to the camp becoming self-supporting in foodstuffs.

Public Relations

During the year every Province was visited at least once by the Regional Public Relations Officer, the Assistant Regional Public Relations Officer or an Assistant Publicity Officer and in many cases by more than one officer. This touring is thought to be one of the most valuable activities of the department as officers are able to form contacts throughout the Region and to become personally known to a very large number of people. Almost invariably touring officers take with them full cinema equipment, public address equipment and film strip projectors and it is very seldom that a cinema show is not given by the accompanying projectionist at all places where a night stop is made.

Every effort is made to attend agricultural shows, the ceremonial opening of schools, dispensaries, etc., and whenever possible Officers accompanied His Excellency the Governor and His Honour the Chief Commissioner on occasions when they toured in the Region.

Whilst on tour officers have held meetings as frequently as possible in order to speak on Government policy, development, and current events and to answer questions. A considerable number of interesting photographs are taken on tour, many of which appear in the Press.

There are now four main newspapers published in the Region, the Daily Comet at Kano, the Nigerian Citizen and the Gaskiya Ta Fi Kwabo at Zaria, and the Northern Advocate weekly at Jos. In addition there are three news sheets published in connection with the Adult Literacy Campaign by the Gaskiya Corporation, Jekadiya, in Hausa fortnightly, Nwanger U Tiv in Tiv monthly for the Tiv Native Authorities and Albishir (started towards the end of the year) in Kanuri for the Bornu Native Authorities.

During the year 633 Press Releases on various subjects of interest in the Northern Region were issued to the Press and all were taken up by at least one newspaper. A large number of photographs was also made available.

Owing to the distances involved it is not practicable to hold regular press conferences but every opportunity is taken of keeping contact with the Press. Many erroneous statements were investigated and corrected.

Many feature articles illustrated by photographs, line drawings and maps have been published, especially in connection with the New Constitution.

Gaskiya Corporation has continued to produce books and pamphlets in the vernacular. Four pamphlets dealing with the New Constitution were published in Hausa and English. The total number distributed was 80,000 in Hausa and 67,000 in English.

The Nigeria Review and the Children's Own Newspaper published by Public Relations Headquarters were also distributed very widely during the year.

There are now five Radio Distribution Stations in the North, at Kano, Zaria, Jos, Kaduna and Katsina, the last named being opened early in the year. A new station at Sokoto has been built but awaits equipment.

The Radio Distribution Service is generally very popular and the quality of local programmes has greatly improved due to co-operation between the Broadcasting Officers and the Local Radio Distribution Committees. Much of the very poor equipment originally installed has been replaced and the influence of the Officers of the partly formed Broadcasting Department has been felt.

The number of subscribers is to a great extent limited by the capacity of the equipment; at the end of the year the number of subscribers was:—

Kano	...	...	1,320
Zaria	...	...	751
Jos	...	...	1,001
Kaduna	...	...	630
Katsina	...	...	296

At most stations there are considerable numbers of people on the waiting list.

There are now three Mobile Cinemas in commission and each Province has been visited at least once. The length of the visits has been increased from one month to six weeks in each Province.

The cinema service is extremely popular and the shows continue to draw very large crowds. Unfortunately it is not possible to bring the service to a very large number of towns and villages situated off the all-season roads as it is frequently necessary for the units to visit Provinces during the rains. The situation has been to some extent improved by the replacement of the old cumbersome vans by much lighter vehicles of the kit car type which are able to traverse roads impassable by the larger vans.

The main problem is to obtain suitable films which will be appreciated by rural audiences. The number of suitable films having some educational value is strictly limited. In order to fill this demand to some extent, financial provision was made in the current estimates for a small 'one man' filming unit to operate in the Region. Mr Mantey, Assistant Publicity Officer, has been trained at Headquarters to run the Unit but the necessary equipment had not arrived by the end of the year.

The public is making increasing use of the Department and a large number of enquiries both verbal and written are dealt with at Headquarters and by officers whilst on tour.

Public Works

There has been little improvement in the staff position during the course of the year, and of 190 approved Senior Service posts only 147 can be filled. The situation is most acute as regards Inspectors (Mechanical) where five duty posts are now vacant and the position is deteriorating through resignations. With the increase of mechanical plant and vehicles these officers are more and more necessary and we have been unable to recruit at the rates payable.

The supply of materials continued to be satisfactory but a serious shortage of steel is now beginning to be felt. Progress in all branches has been good, however, and it is expected that expenditure on new works will total £1,375,000 in 1951-52 as compared with £1,009,000 in 1950-51.

Minna Water Supply was completed in 1949, and the catchment reservoir filled for the first time in September 1951. Sokoto Urban Water Supply is expected to be finished this financial year, the intake and distribution system having been already completed. At Ilorin, Messrs Richard Costain continue to make progress on the new water supply.

Test pumping from the new boreholes at Katsina was successful, and the complete scheme is now being prepared. Indents have been sent to the Crown Agents for approved water schemes at Gusau, Gombe, Lokoja and Abuja. A second dam has been built at Jos, impounding over fifty million gallons of water. The extensions of the Kano town supply, including new pumps, treatment plant and rising main are very nearly finished, but the new pumps cannot be used until the electricity supply extensions are completed.

Previous records of rural well sinking have again been passed, and it is expected that 800 new wells will be completed in 1951-52. Several windmills are in operation and more have arrived. Rural water supply work has been done in all provinces except one.

Thirteen successful boreholes were completed in 1950-51 in addition to eleven bores for coal prospecting in Kabba Province. In the first

seven months of 1951-52 nine successful holes were sunk with an aggregate depth of 3,300 feet. At Maiduguri, a borehole was sunk by a British contractor to 3,300 feet, but the work has been held up for technical reasons since July 1951. It is expected to be re-opened soon.

On the Kaduna-Kwongoma road which runs due west from Kaduna and which was begun in January 1951, the final location is expected to reach Mile 60 this year, and construction to Mile 40, including a bridge of seven 40 foot spans over the River Tubo. The Zaria-Kano road has been completed to Mile 24 and final location has reached Mile 64. The location of the remaining thirty-eight miles to Kano will be done this dry season. The Hlesha-Yashikera-Dahomey road will shortly be finished by the completion of the last two bridges, now in hand.

On the Yola-Wukari road the construction of the Mayo Belwa bridge (8 x 40' spans) has made good progress and location and construction is being done on the Jalingo-Beli section. The location of the final section to Douga will be examined in the present dry season. A start has been made on the Maiduguri-Bama road which is expected to form part of the proposed Maiduguri-Fort Lamy route.

Final location of the Gombe-Tula-Numan road is nearly complete, and construction from the Numan end has begun. This road will become the main route to Yola. Work on the Kontagora-Rijau road has been re-opened, and the Kontagora bridge has been completed. A new location of the Zaria-Pambeguwa road has been made and construction is in progress, including the Gahna bridge of seven 40 foot spans near Zaria. Construction of the Abuja-Abaji road, connecting Kabba Province with Abuja and the north, is proceeding by voluntary labour in Niger Province. Survey of the Zamfara Valley road has been completed.

The programme of bituminous surfacing has been delayed first by late arrival of bitumen from England, and secondly by the inability of the Railway to bring it to the sites. Accordingly it is only expected that seventy-five miles will be done in 1951-52, as compared with forty-six miles in 1950-51. On the Kano-Maiduguri road it was decided to discontinue bitumen work until the letting of a major contract which would include it. On the Katsina-Kano road it is expected that twenty miles will be done this year leaving twenty-six miles to complete the whole road in 1952-53. It is hoped that bituminous surfacing on the Gusau-Sokoto road will reach Mile 135 this financial year, making a total of twenty-two miles completed. It had been intended to reach Mile 151 this year but the delay in receiving bitumen prevents this. Work is beginning on the road from Ilorin to Oyo, and continues between Puntua and Yashu. On the Jos-Bauchi road a further ten miles of bituminous surfacing are being done this year, leaving sixty miles to complete.

The Kano-Maiduguri road is now to be financed partly by E.C.A., and a survey is being made by a contractor with a view to letting a contract for the necessary improvements including bituminous surfacing.

On the same road the Foggo Bridge, the longest road bridge in the territory, has now been completed by Messrs Richard Costain, who are now finishing the remaining bridges between Foggo and Kano. This road will now be open at all seasons.

The replacement of old bridges continues on the Jebba-Bida-Wamba-Karshe road, particularly the replacement of 75 feet timber spans between Keffi and Wamba. It is hoped to replace all these during the present dry season. The Kasanu Bridge (8 x 30' spans) on the Yelwa-Jega Road will be finished this year, and the Dan Zaki bridge on the same road will be begun. Two bridges are being completed on the Shendam-Wase road in Plateau Province, leaving only the Wase Bridge at Mile 11 to complete the road.

A large programme of building work is in progress in Kaduna, including the completion of the second Secretariat block, a block of flats, extensions to the Catering Rest House, thirty-three Senior Service Quarters, various new offices, Police and Medical Stores, and an Executive Council Chamber. Building work has continued in all Provinces from Regional and C.D. and W. funds. The new hospitals at Bauchi and Birnin Kebbi are finished and new hospitals or extensions are in progress at Yola, Mubi, Makurdi, Maiduguri, Ilorin, Offa, Lokoja, Minna, Kafanchan, Jos and Sokoto. A Training School for nurses in training and a hostel for dispensary attendants and midwives in training have been completed at Kano, a Rural Health Centre built at Kankiya and another begun at Argungu. A Rural Education Centre is making good progress at Bauchi, and Women's Elementary Training Centres are under construction at Kabba and Maiduguri. A Men's Elementary Training Centre has been built at Mubi. The Public Works Department has also been responsible for the building of Girls' Senior Primary Schools at Kontagora and Maiduguri. A contract has been let for the construction of a Boys' Secondary School at Keffi and work was begun on the site in December. Work has also started on the main buildings of the Agricultural School at Samaru and the quarters have been almost completed. Post Offices have been finished at Katsina Potiskum and Okene and are under construction at Jebba, Vom, Bukuru, Yelwa, Damaturu, and Kano (extensions). New telephone exchanges are being built in Jos and Kano. Other buildings in progress include the Jos Museum, the Ilorin Police Barracks, Radio Distribution Stations at Sokoto and Maiduguri and Civil Aviation Radio buildings at Bida and Maiduguri.

Railway

The year 1951 has seen the fiftieth anniversary of the Nigerian Railway.

Railway development plans have had to be somewhat curtailed because rising operating costs, together with heavy and increased expenditure on renewals of locomotives, rolling stock and plant necessitated since the war, have caused a serious deterioration in the

Railway's financial state. Increases in Railway rates have had to be faced and certain of these took effect as from 1st November. Care has been taken to see that the additional burden is placed where it can best be carried without injury to the economy of the country, and higher rates combined with better crops will, it is hoped, bring about a more satisfactory balance.

As Members are aware, a "go-slow" strike was called by the African Locomotive Drivers' Union on 9th December and lasted for three and a half weeks. As a result of this strike there was a complete cessation of all railway passenger services, causing grave inconvenience to the public, and severe congestion in the movement of goods. Prices of some staple foods rose by as much as two hundred per cent and motor transport charges also rose steeply.

The groundnut traffic in the 1950-51 season was poor and was only partly offset by the increase in rates mentioned in my Address of last year. The 1951-52 crop however appears to be an excellent one and in spite of the "go-slow" strike the Railway has made a good start in evacuation, and it is confidently expected that this will be completed before the next crop is due.

The cotton lint crop proved excellent and the figure of 13,156 tons railed represented an increase of 50 per cent on that of the previous year.

The Railway's road services were strengthened by nineteen Leyland Comet lorries and twenty trailers. The four new thirty-two seater passenger buses received early in 1950 continued to be popular and a record number of passengers was carried. It is to be regretted that the condition of the roads on which these buses run is not yet suitable for them. Materials have started to come forward however, and some progress in surfacing has been possible. When completed this will contribute in no small measure to the comfort of the passengers and the safety of the goods and will lengthen the life of the vehicles which are at present operated under arduous conditions.

A substantial addition to the Railway fleet of cattle wagons was made during the year to meet the continued expansion of the Livestock trade.

Traffic, and in particular import traffic, is continuing to increase and it is clear that it will be necessary to provide further facilities for handling it. Further orders for locomotives and wagons have been placed in the United Kingdom for delivery next year.

Despite the restriction in capital expenditure fair progress has been made on essential work. Improvements have been made at Zaria on reduced schemes, whilst at Jos two additional Goods Sheds were put into use during the year. These, together with new trader sidings to serve privately-owned goods sheds should do much to relieve congestion at this important station, which at the present time handles so much traffic for French Tchad Territory. Considerable progress was made

at Kano towards the completion of the new cattle siding which has necessitated a special construction of two miles in length laid in the direction of the Kofar Mazugal Gate. This siding will also be used for the delivery of kola nuts and so keep both cattle and kolas away from the town centre. A running shed has also been designed for Minna and the steelwork for this is now being manufactured in the United Kingdom.

The scheme for the provision of improved accommodation for the Junior Service staff of the Railway is proceeding steadily and an appreciable number of quarters have already been constructed at Offa, Jebba, Minna, Kaduna, Zaria, Kano, Makurdi, Kafanchan and Jos. Provision of Railway Police barracks has also received attention and at main depots they have either been completed or are under construction.

Since 1945 the Railway Administration has embarked on a programme involving nearly £3,000,000 for the renewal of rails and sleepers over 340 miles of the main line. At present some 270 miles of track have been relaid including the 162 mile section between Jebba and Minna, where local timber sleepers instead of steel were used.

The relaying of the line between Zaria and Kano in heavier material has now been completed and labour has been disbanded. The track is now suitable for use by the River Class engines which can thus operate over the whole line from Kano to Lagos or Port Harcourt.

In order to permit 16-ton axle loading between Apapa and Jebba, work on replacing the 55 lb. track between Offa and Jebba with 80 lb. track has started. It progressed satisfactorily up to November, when operations had to be suspended at Mile 281½ due to a short fall in the supply of permanent way material from the United Kingdom. With adequate supply of rails, etc., the remaining 21 miles can be completed in about four and a half months.

The work of strengthening Akkerri bridge was completed in October 1951. The timber decking of the Jebba bridge is being replaced by steel decking capable of taking 8-ton gross loads and the work is expected to be completed in mid 1952.

It is a matter of serious concern to the Railway Administration that recent steep rises in the prices of steel and cement are increasing the cost of all works, and the shortage of steel and of qualified engineering staff is delaying all larger engineering projects.

Survey

During the year the planned expansion of the regional department continued but owing to shortage of supervisory staff was less rapid than had been hoped.

A provincial office was opened at Minna in November and the surveyor in charge of the Land Settlement Commission

was given junior assistants to enable him partially to undertake the duties of provincial surveyor in Kano.

The Survey School at Kaduna continued to operate and a total of twenty-three students passed out during the year. Of these eight were for service in the Northern Region and eighteen for other Regions or other departments. Ten students, all for the Northern Region, remained in the school at the end of the year. The flow of suitable applicants for entry was as great as can be absorbed by the Northern Region and included a larger proportion of Northerners than in previous years.

The progress of the young survey assistants who left the school during the last two years has been steady, though owing to lack of trained supervisory staff to give them essential help and instruction it has been very slow.

The administration of the Land Settlement Officer's school at Kano was taken over from the Native Administration on 1st April and the school is now entirely staffed by Survey Department personnel. During the year twelve land settlement officers and ten chainmen have attended courses at the school and two Hausa survey assistants have been given preliminary training.

Every activity of the department has been hampered by shortage of staff and by lack of office accommodation. The situation was eased slightly by the arrival of four surveyors from England who will in a short time be available to supervise and train the young and inexperienced African field staff, but the junior service technical staff is still 27 per cent below strength. A new office was completed at Makurdi and funds were allocated for the construction of a new drawing office which should reduce the present bottleneck at Kaduna.

Re-armament held up the supply of essential instruments to some extent but just enough were received to equip the growing field staff.

In spite of shortages the activities of the department have continued rapidly to expand. A small topographical drawing office was established at Kaduna in September. By the end of the year it had produced six new map sheets on a scale of 1/62,500 from the air photographs taken by the Royal Air Force in 1950, and it is expected that in a short time the output of this office will not be less than four new map sheets per month. Field parties are engaged in the establishment of ground control for a further forty-eight sheets in the Shendam and Gombe areas. These maps are required for development purposes and by the Geological Survey and will be produced half by the Kaduna office and half by the Directorate of Colonial Surveys in London.

As the young field staff have gained experience, so has their output increased. Numbers of miscellaneous minor surveys have been carried out for development and other purposes; large scale plans have been prepared of Bauchi and Sokoto and are in course of preparation for

Kaduna, Zaria, Kano and Jos and smaller layouts at other places. The output of surveys for Certificates of Occupancy by Government surveyors has risen from an average of 6.0 per month in 1950 to 9.7 per month in 1951 while the output of surveys for various forms of mining title has remained steady at about twenty-three per month, though this figure too is now rising. This increased activity is reflected in an increase in revenue earned which is likely to be not less than 30 per cent greater in the financial year 1951-52 than it was in 1950-51.

In spite however of the steady increase in output, arrears are being little if at all reduced, for demands for surveys of all sorts from village settlement layouts to topographical maps are growing as fast as the department expands.

Veterinary

The most important work performed by the Veterinary Department has been the continued maintenance of a Veterinary health service, which by its efforts has enabled the herds and flocks of the country to produce the animal products of meat, milk, hides and skins, and to reproduce their kind without suffering the calamity of widespread epizootic disease.

To this end the policy of making available to stock owners prophylactic vaccines against the major diseases has continued, and the Laboratories at Vom have been able to supply the requirements of the field worker, who has inoculated with the vaccines and who has also controlled by quarantine and slaughter such outbreaks of disease as occurred.

This extremely useful work, which benefits the whole community by providing the means for full production of foods of animal origin, has been restricted only by the availability of suitable staff and the co-operation of the stock owners.

More spectacular and of no small importance has been the work of experimenting with new drugs against trypanosomiasis; and it was found that trade cattle inoculated before commencing a long trek to the southern markets through tsetse fly infested country are protected from the disease for a sufficiently long time to enable them reach their destinations in good health and actually to show a weight gain, whereas untreated ones became affected, lost condition and weight and in some cases became so weak that they had to be slaughtered on the way.

Trade cattle entering and moving within the country are inspected for disease and controlled in their movements in order to prevent as far as possible the introduction of disease into breeding herds by contact with them.

The system of inspecting and grading cattle intended for transport by rail has continued with several objects in view, the detection of

advantages to better animals, and the prevention of cruelty and economic loss by stopping the railing of cattle unfit to travel.

The three Livestock Investigation Centres built at Birnin Kebbi, Katsina and Biu from Development funds progressed to the end of the first stage, that of construction and organisation. Stocking was undertaken and a policy of investigational work drawn up for each centre to guide the officers in charge in their study of the factors of disease and health which affect the productivity of livestock in their areas.

The Veterinary Department continued to instruct on and to supervise the processing of hides and skins to ensure a high standard of quality for leather production.

Clinical and advisory work was performed at Native Administration centres and sub-centres and such work as the enforcement of measures against cruelty to animals continued to receive attention.

West African Institute for Trypanosomiasis Research

On previous occasions I have given some account of the progress made in the development of the West African Institute for Trypanosomiasis Research, which with its headquarters and laboratories in this Region is designed to serve the needs of the four West African Colonies. On this occasion I am glad to be able to report that all arrangements in connection with the setting up of this new research organisation have now been completed and that the Institute was formally opened by His Excellency the Governor on the 31st January, 1951.

The Institute has been established by Ordinance as an independent body, the management of which is vested in a Statutory Committee composed of representatives of the Secretary of State for the Colonies and the four West African Governments, including one representative from the Northern Region of Nigeria.

At the present time the Institute has a full complement of senior service staff and good progress has been made with the recruitment and training of local personnel for technical and other duties. It has been possible, during the past year, for a strong team of scientific workers with their technical assistants to make a satisfactory beginning on the ambitious programme of research which lies ahead.

Intensive studies have been carried out on the species of tsetse known to be responsible for the dissemination of human and animal trypanosomiasis in the Northern Region. These and allied investigations are expected to have an important bearing on the measures to be adopted for the elimination of tsetse flies over large areas of this Region in the immediate future, and for which financial provision has already been made. In this and other work of a similar nature we are fortunate in having the best technical advice available at our Northern Capital.

The results of some of the experimental work initiated in the field during the period of construction of the laboratories have now become available. The new drug Antrycide has been subjected to carefully controlled experiments and we now know what may be expected of it under local conditions. It has been shown that when used to protect cattle in localities where only the riverine species of tsetse are present, this drug affords a high degree of protection to Fulani cattle if administered at intervals not exceeding seventy days. Unfortunately other experiments have shown that the same satisfactory results cannot be achieved in the presence of the more dangerous woodland species of tsetse, but it has been shown that Antrycide, when administered for the treatment of animals suffering from trypanosomiasis, can be relied upon to effect a complete cure in nearly all cases. These results mark a distinct advance in the prevention and cure of animal trypanosomiasis. Meanwhile, experiments with another group of drugs (the phenanthridinum series) have been carried out and, while satisfactory results were achieved with two of them, their administration was associated with a higher degree of toxicity than was observed in the case of Antrycide. Recently the discovery of a new drug, at present known as "528", has been announced by Dr Lourie working at Oxford University, and a supply of this drug is now on its way to the Institute for laboratory and field trials under West African conditions.

Further work has been done on drugs for the prevention and cure of human sleeping sickness with encouraging results. Variations were observed in the efficacy and toxicity of different batches of some of these drugs but arrangements have now been made for their standardisation, and fresh supplies of standardised products are now on their way from the United Kingdom. A new preparation known as "Msb" is shortly to be subjected to trial as a prophylactic for the human disease, while other experiments are now being undertaken with pentamidine which has already shown great promise as a prophylactic.

In carrying out drug trials for the prevention and cure of both human and animal trypanosomiasis the Institute has worked in the closest co-operation with our Medical and Veterinary Departments, and we may be sure that a continuation of this close collaboration will produce far reaching effects on the well-being of the people of this Region and on their animal husbandry.

In other aspects of its work the Institute has collaborated closely with the Agricultural Department. At the request of the Department an experiment on the comparative tolerance to trypanosomiasis of three groups of cattle has been undertaken and has recently been completed. These experiments have shown that pure-bred N'dama cattle, indigenous to French Guinea, withstand exposure to trypanosomiasis infection in Northern Nigeria to a very much greater extent than either pure bred Zebu cattle or first-crosses between N'dama and Zebu. Under the conditions of this experiment, in which the cattle were exposed in the first instance to infection from riverine

tsetse and later to an even more severe challenge from woodland tsetse, the N'dama survived without loss of life or condition and showed only transient low grade infections, whereas the pure-bred Zebus and cross-breeds maintained under identical conditions all became infected and all died of trypanosomiasis. This pilot experiment can be regarded only as a promising pointer, but sufficient information has already been obtained to warrant a much fuller investigation of the apparent tolerance of N'dama cattle to trypanosomiasis, and particularly of the true nature of this tolerance. Work on these lines has now been started.

The Institute has taken a keen interest in the progress of some of our Development Schemes. Special investigations have been carried out at Mokwa during the past year with a view to the eradication of the highly dangerous woodland tsetse, while at Kontagora, Shendam and Jema'a observations are being made on the protection of cattle by means of drugs.

Conclusion

That brings me to the end of this Summary of our activities and I trust it may have given Members an impression of the speed with which the work is progressing and of the factors which make a still further increase in tempo so difficult. The physical problems set us by the necessity of having to provide in this Region the office accommodation and houses for the largely increased staff both of the Senior and the Junior Service who are so necessary, and welcome, if we are to accept the new authority and responsibility now delegated to us, is in itself tremendous; and Members will have seen here in Kaduna, and in other centres, how much has been done in this direction, and how much still remains undone.

But as I have said before, tremendous possibilities lie in front of us today. Let us therefore press forward together in a spirit of urgency and of responsibility, and let us exert our influence, each one of us, in the interests of rapid and ordered progress, goodwill, and mutual trust.